



# Philadelphia University

## Academic Catalog 2012-2013

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Philadelphia, Pennsylvania 19144-5497  
215.951.2700

[www.PhilaU.edu/catalog](http://www.PhilaU.edu/catalog)

## **Mission Statement**

Philadelphia University is a student-centered institution that prepares graduates for successful careers in an evolving global marketplace. By blending the liberal arts and sciences, professional studies, interdisciplinary learning and collaborations in and out of the classroom, students learn to thrive in diverse and challenging environments. Our students are encouraged to form supportive relationships with each other as well as faculty, staff and alumni in an academically rigorous setting that is focused on intellectual and personal growth. Philadelphia University is an experiential learning community where integrity, creativity, curiosity, ethics, responsibility and the free exchange of ideas are valued.

## **Anti-Discrimination Policy**

Philadelphia University does not discriminate on any condition of ethnicity or ancestry, or on the basis of creed, race, color, sex, age, religion, national origin, marital status, sexual orientation or disability in its admissions, education programs, activities or employment practices. This policy is in accordance with state and federal laws, including Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

## **Responsibility to Keep Informed**

The programs, policies, procedures, requirements, tuition and fees described in this catalog are subject to change without notice, at the discretion of the University.

Students are ultimately responsible for their own progress toward graduation; they are expected to use the academic catalog as a reference handbook and to familiarize themselves with the principal policies and procedures contained in it. The online version of this academic catalog ([www.PhilaU.edu/catalog](http://www.PhilaU.edu/catalog)) is updated annually. Students are responsible for monitoring the website concerning changes to policies and procedures that might affect their progress toward graduation and regularly check campus mailboxes and Philadelphia University email as a means of keeping informed.

## **A Brief History of the University**

Philadelphia University was founded in 1884 as the Philadelphia Textile School in the wake of the 1876 Centennial Exposition. A group of textile manufacturers, led by Theodore Search, noticed a sizeable gap between the quality and variety of American textile products and those displayed by European mills. To address this, the group established the School to educate America's textile workers and managers.

Several years later, the School affiliated with the Pennsylvania Museum (now the Philadelphia Museum of Art) and School of Industrial Art. By the mid-1890s, the School had settled at Broad and Pine streets in downtown Philadelphia. It survived the Depression and entered a new period of growth at the outset of World War II. In 1941, the School was granted the right to award baccalaureate degrees and changed its name to the Philadelphia Textile Institute (PTI).

By 1949, PTI, which was no longer affiliated with the museum, began conducting classes at its present site in the East Falls section of Philadelphia. Throughout the 1950s, it continued to grow, and, in 1961, changed its name to Philadelphia College of Textiles & Science.

The student population doubled from 1954 to 1964, and again by 1978. Programs in the arts and sciences and business administration were added. The College purchased an adjoining property in 1972, doubling the size of its campus.

As Philadelphia College of Textiles & Science the institution offered its first graduate degree, the Master of Business Administration, in 1976. With the purchase of properties in 1980 and 1988, the size of the campus nearly doubled again and grew to include additional classrooms, research laboratories, student residences and athletic facilities. In 1992, the 54,000-square-foot Paul J. Gutman Library was built.

The College continued throughout the '90s to provide its students with the highest-quality education and real-world experience demanded by their chosen professions, adding majors in a wide range of fields. To better reflect the institution's breadth and depth, the College applied for and was granted university status by the Commonwealth of Pennsylvania in 1999. And, in a historic move, the Board of Trustees voted to change the School's name to Philadelphia University on July 13, 1999.

The University now has three colleges, including the Colleges of Architecture and the Built Environment; the Kanbar College of Design, Engineering and Commerce; and the College of Science, Health and the Liberal Arts.

## The University Today

Philadelphia University is the model for professional university education. Through Nexus Learning – our signature approach to teaching and learning that is active, collaborative, connected to the real world and infused with the liberal arts – we are educating the next generation of leaders for the 21st-century work world.

For more than 125 years, Philadelphia University has fostered a culture of market-driven innovation. Students at PhilaU learn to integrate knowledge, develop broader decision-making skills and untangle complex problems.

Complementing our curriculum, our three Colleges give students the freedom to learn vital skills outside of their discipline through collaboration. We marry classic disciplines such as sociology and biology with professional specialties like business management, fashion design, communications and architecture. And, from day one on campus, we bring industry leaders to campus to partner with our students. It's an approach that mirrors industry and makes companies very excited about hiring our graduates.

No other school has our unique intersection of expertise in a transdisciplinary environment at the same scale. Weaving these areas of study, combined with our passionate and dedicated faculty, PhilaU students graduate with a pioneering combination of professional skill, breadth of perspective and synthesized decision-making abilities — all developed while working on real-world challenges.

Our students feed off the entrepreneurial DNA of the campus and graduate with the skills necessary to turn their innovative ideas into commercial successes. It's one of the reasons that today Philadelphia University's alumni are global leaders in design, architecture, fashion, business, engineering, health professions, textiles, materials technology, sustainability and science.

Philadelphia University is a private university with 3,200 part- and full-time undergraduate and graduate students from 38 states and 30 countries. The University offers more than 60 undergraduate and graduate degree programs in the Colleges of Architecture and the Built Environment; the Kanbar College of Design, Engineering and Commerce; the College Science, Health and the Liberal Arts; and the School of Continuing and Professional Studies leading to the Bachelor of Science, Bachelor of Science in Engineering, Bachelor of Architecture, Bachelor of Landscape Architecture, master's degrees and a doctoral degree in Textile Engineering and Science.

## The Campus

The 53 buildings on the University's 100-acre campus range from historic Victorian mansions to contemporary classrooms, library and residential facilities. In June 2011, the Philadelphia University community broke ground for a new, innovative academic building that will house the College of Design, Engineering and Commerce. The Kanbar Campus Center, a 72,000 square-foot social hub for students, faculty and staff, and The Gallagher Athletic, Recreation and Convocation Center have transformed our main campus, and are having a dramatic impact on the academic and social environment for all members of the University community. The Tuttleman Center, a 31,500 square-foot, high-tech academic facility, is fully wired and offers students and faculty access to the most sophisticated technology available.

The tree-lined Main Campus is located on the edge of Philadelphia's Fairmount Park in the beautiful residential area of East Falls, 15 minutes from historic Center City Philadelphia. Most students live in on-campus housing, including co-ed and single-sex residence halls, townhouses and two- or three-bedroom apartments. Opened in fall 2011 is a stunning 300-bed apartment complex called the PhilaU Residences at Falls Center. Apartments include state-of-the-art kitchens, spacious bathrooms and beautiful views of the city of Philadelphia. The facility has an auditorium, studio and lounge space, and convenience store.

The Philadelphia University campus is wireless and provides for a highly sophisticated technology environment.

The Gallagher Athletic, Recreation and Convocation Center is home to three regulation-size basketball courts, a state-of-the-art fitness center, aerobics studio, racquetball court and elevated jogging track, as well as a 251-space underground parking garage. In addition, athletic facilities on campus include a baseball field, softball field, tennis courts, and soccer and lacrosse fields.

The University is also close to beautiful countryside, big-city life, concerts, galleries and museums, great restaurants and theaters.

## Development and Alumni Relations

215.951.2850

[www.PhilaU.edu/alumni](http://www.PhilaU.edu/alumni)

The Office of Development and Alumni Relations is committed to connecting alumni with their alma mater and to matching the philanthropic interests of Philadelphia University's donors with the needs of the institution.

Since its founding in 1884, Philadelphia University has relied on private support to be the model for professional university education. Today, the University's alumni are global leaders in design, architecture, fashion, business, engineering, health professions, textiles, materials technology, sustainability and science. To prepare such leaders, we are grateful for the generosity of our many donors, including alumni, friends, parents, corporations and foundations.

## Alphabetical List of Philadelphia University Undergraduate Degree, Concentration, Certificate and Minor Programs

Program	Bachelor	Associate	Concentration	Minor
Accounting		A	Con	M
Animation	BS			
Architectural History/Theory				M
Architectural Studies	BS			
Architecture	BArch			
Behavioral and Health Services	BS			
Biochemistry	BS			
Biodiversity				M
Biology	BS			
Biopsychology	BS			
Business	BS			
Business Administration		A		M
Chemistry	BS			
Construction Management	BS			M
Design Technology			Con	
E-Commerce				M
Economics				M
Engineering	BSE			
Environmental Science			Con	
Fashion Design	BS			
Fashion Merchandising			Con	
Fashion Merchandising and Management	BS			
Fashion Product Development			Con	M
Finance			Con	M
Foundation Design				M
Genetics				M
Graphic Design Communication	BS			M
Health Sciences	BS			
Health Sciences/Occupational Therapy	BS/MS			
Health and Human Services		A		
Health Services Management	BS			
Health Services Management: Business	BS			
Health Services Management: Psychology	BS			
Historical Preservation			Con	M

Human Resource Management	BS			M
Industrial Design	BS			
Information Systems				M
Information Technology	BS			
Interactive Design and Media	BS			
Interior Design	BS			
International Business			Con	M
Landscape Architecture	BLA			M
Landscape Design				M
Landscape Planning				M
Law and Society	BS			M
Law Enforcement Leadership	BS			
Leadership in Emergency Services	BS			
Leadership in Homeland Security	BS			
Management			Con	M
Marketing			Con	M
Mechanical Engineering	BSE			
Multimedia and Visualization				M
Occupational Therapy Assistant		A		
Organizational Behavior				M
Organizational Leadership	BS			
Photography			Con	
Photography and New Media				M
Physician Assistant Studies	BS/MS			
Pre-M.B.A.	BS			M
Pre-Medical Studies	BS			
Professional Communication	BS			M
Psychology	BS			M
Psychology/Occupational Therapy	BS/MS			
Public Health				M
Social Sciences				M
Textile Design	BS			
Textile Materials Technology	BS			M



# **Alphabetical List of Philadelphia University Graduate Degree Programs**

## **DEGREE PROGRAMS**

Doctor of Philosophy in Textile Engineering and Science  
Master of Business Administration  
Master of Science in Construction Management  
Master of Science in Disaster Medicine and Management  
Master of Science in Fashion Apparel Studies  
Master of Science in Industrial Design  
Master of Science in Interactive Design and Media  
Master of Science in Interior Architecture  
Master of Science in Midwifery  
Master of Science in Occupational Therapy  
Master of Science in Physician Assistant Studies  
Master of Science in Sustainable Design  
Master of Science in Taxation  
Master of Science in Textile Design  
Master of Science in Textile Engineering

## **COMBINED DEGREES**

M.B.A./Master of Science in Physician Assistant Studies  
M.B.A./Master of Science in Taxation  
B.S./M.B.A. Programs  
B.S./M.S. Programs

## **GRADUATE AND POST-GRADUATE CERTIFICATE PROGRAMS**

Business Administration  
Business and Organizational Continuity  
Disaster Medicine and Management  
Midwifery  
Sustainable Practices

## Student Life

The Division of Student Life offers comprehensive programs and services that foster an educational environment conducive to the holistic development of students. By building bridges between the curricular and co-curricular experiences, Student Life educators provide opportunities for students to become successful, competent, lifelong learners. Information on specific programs and services follow. In support of the University mission, the Division of Student Life supports Philadelphia University graduates ...

- To thrive in multiple, varied and diverse environments.
- To construct an understanding of self to inform decisions.
- To employ their influence to improve the greater community.
- To develop skills and knowledge for personal and professional advancement.

### ATHLETICS

215.951.2720

[www.PhilaU.edu/athletics](http://www.PhilaU.edu/athletics)

The Department of Intercollegiate Athletics is an integral part of Philadelphia University. A professionally-managed and well-rounded athletics program serves to enrich the student's life in college and enhances his or her preparation for a full and rewarding life after college.

#### *Mission*

The mission of the Department of Athletics is to afford our student-athletes, men and women, the opportunity to participate in a challenging and competitive athletic program, while ensuring that they are provided with a quality education in keeping with the University's long-standing concern for each student's distinctive needs.

Athletics are the most publicly visible activity of the University. Its standards, goals and ideals must remain in harmony with the University's academic programs. The athletic program will be conducted in a manner that is most conducive to the physical welfare of the student-athletes who participate, allowing them to grow physically, emotionally and intellectually. The academic success of those students is considered paramount.

Our administrators, coaches, and athletic department staff are dedicated to maintaining the University's reputation for integrity and excellence, both on and off the playing fields. All athletic contests, practices and related activities will be conducted in total compliance with the principles of fair play and amateur competition, as defined by the Central Atlantic Collegiate Conference (CACC) and the National Collegiate Athletic Association (NCAA).

We empower our student-athletes to make a difference, both in their University community and the surrounding Philadelphia area. By doing so, we believe they will be better prepared after graduation to assume the leadership roles for the challenges of an increasingly interdependent world.

### *Program Learning Goals*

The Department of Athletics achieves its mission by establishing the following learning goals for students:

- To construct a greater understanding of self through their experiences in athletics.
- To demonstrate the ability to perform as a collaborative unit.
- To engage in experiences to enhance community relations.
- To challenge the viewpoints of themselves and others to expand awareness of difference.
- To choose behaviors, skills and habits that support their overall health and well-being.

The University offers 16 intercollegiate sports competing at the NCAA Division II level: men's and women's basketball, cross country, soccer, track and tennis; men's baseball and golf; and women's lacrosse, rowing, softball and volleyball. The University holds membership in the National Collegiate Athletic Association (NCAA) and the Central Atlantic Collegiate Conference (CACC). Athletic scholarships are available and interested students should contact the Department of Athletics at 215.951.2720 for more information.

Undergraduate students are required to take two semesters (.5 credits each semester) of fitness, wellness or recreation options, which can be satisfied by two seasons of intercollegiate competition.

### **Recreation Program**

215.951.2723

The Department of Athletics organizes and promotes structured and competitive recreational and fitness and wellness activities that are open to full-time students, faculty and staff. The Recreation Program provides an opportunity for everyone to participate in enjoyable physical activity and to develop an appreciation for the benefits of physical exercise. Activities are offered in league/tournament format, fitness programs, instructional programming, informal recreation, club sports and special recreation events for student organizations.

### **Facilities**

Philadelphia University hosts athletic events in The Gallagher Athletic, Recreation and Convocation Center, and at the Alumni and Ravenhill Athletics Fields. The campus also features six newly refurbished tennis courts, a softball field, a state-of-the-art fitness center, racquetball court, aerobics studio and an elevated track. Check out Athletics at Philadelphia University by visiting [www.philaurams.com](http://www.philaurams.com). Go Rams!

### **CAREER SERVICES CENTER**

*The Career Services Office is located in the Kanbar Campus Center, Suite 313.*

215.951.2930

[careerservices@PhilaU.edu](mailto:careerservices@PhilaU.edu)

The Career Services Center offers undergraduate, graduate, continuing studies students and alumni assistance with their careers and professional development, and many opportunities to develop the

skills for a meaningful career. Career Services provides individual advising by qualified counselors as well as opportunities to connect with employers via online job listings; employer networking receptions, career seminars and on-campus recruiting.

Starting freshman year, students can work with counselors to complete the careerEDGE, a tool developed to help students identify their skills, values and interests to help them develop a solid, individualized career plan.

Career Services partners with faculty from all schools to present meaningful instruction on various topics, including résumé writing, interview skills, job-search strategies and networking. Multiple online resources are available including Interview Stream, a site where students and alumni can conduct mock interviews, and Reference USA, a comprehensive database to locate employers around the country and/or conduct company research. Career Services offers an online job listing and résumé service called CareerLink. Undergraduate students, graduate students and alumni may post résumés and apply for positions through the system.

Career Services manages the internship program and assists all students with preparation for securing an internship position and academic credit for the experience. Employer networking receptions, Design Expo, Alumni Portfolio Showcase, career panels, mock interviews, on-campus interviews and other activities allow students to interact personally with employers and alumni to learn more about career opportunities in a more personalized setting.

The most important factor contributing to student success in entering the job market is student involvement in the career-development process. The Career Services Center encourages students to meet one-on-one with a counselor to learn the latest job search strategies that contribute to students' securing meaningful career positions and acceptance into graduate programs.

### **COMMUNITY SERVICE PROGRAMS**

*The Office of Community Service Programs is located in The Kanbar Campus Center, Room 317.  
215.951.2856*

Philadelphia University believes that community service initiatives are a central part of the undergraduate experience. Accordingly, the Office of Community Service Learning works to increase student access to the community service opportunities, serve as an informational resource about community agencies, supports students' civic engagement and promotes service as a tool for learning.

The goal of the Office of Community Service Learning is to develop students into community conscious leaders who have an active and engaged relationship with the city of Philadelphia, surrounding neighborhoods, and the broader context of society. Participation in community service projects and initiatives provides opportunities for students to relate classroom theory to real-world experiences. Students will gain better understanding of the world around them and the importance of acting as agents of positive change.

There are several ways in which students can take advantage of these opportunities. Students can enroll in SERVE-101: Learning and Serving in Philadelphia. Students have two enrollment options: earn a free-standing credit or use the course to satisfy one or both of their PE graduation requirements. SERVE-101 is designed to create an opportunity to understand the reciprocal nature and responsibility

of citizenship through both practical applications and critical reflection. Additionally, annual service-based traditions on campus include Special Olympics, Habitat for Humanity, AIDS Walk, Relay for Life and the Red Cross Blood Drive.

Students interested in finding a way to serve in the community can contact the Office of Community Service Learning at [communityservice@PhilaU.edu](mailto:communityservice@PhilaU.edu) and the staff will help connect the student with a local organization meeting their area of interest.

## **COMMUTER SERVICES**

*The Office of Commuter Services is located in the Department of Student Activities in The Kanbar Campus Center, Room 301.*

*215.951.2744*

[commuterservices@PhilaU.edu](mailto:commuterservices@PhilaU.edu)

[www.PhilaU.edu/commuters](http://www.PhilaU.edu/commuters)

Commuter Services provides resources, programs and information to meet the needs of off-campus and commuting students, as well as potential off-campus students. We provide a range of engagement and involvement opportunities that assist in their connection to the campus community and one another. Whether it is welcoming new commuters to PhilaU, assisting students in finding off-campus housing and/or roommates, or continuing to build the commuter community, the Assistant Director of Student Activities and Commuter Leaders are dedicated to serving the needs of commuting and off-campus students.

### ***What makes PhilaU commuter services stand out?***

#### *Association of Commuting Students*

ACS is a student-run organization that provides a forum for off-campus students to voice concerns and issues that affect those who do not live on campus. It's also a channel for off-campus students to sponsor PhilaU activities and meet others.

#### *Commuter Cash (C-Cash)*

C-Cash is an incentive program to promote campus connection and involvement for first-year students who live off-campus. Students can earn C-Cash for attending campus events, turning in good grades and participating in campus life. At the end of the semester, students can use C-Cash to win various prizes.

#### *Commuter Leaders (CLs)*

Commuter Leaders are upper class off-campus students who serve as resources and guides for first-year commuters. A CL's primary responsibility is to help introduce new commuters and off-campus students to Philadelphia University and assist them in their transition to college life. First-year commuters are assigned a CL before the academic year begins according to the first letter of their last name. Commuter Leaders are the main tool in connecting new commuting students with the campus community and one another.

## **COUNSELING SERVICES**

*The Office of Counseling Services is located in The Kanbar Campus Center, Suite 323.  
215.951.2868*

Counseling for personal concerns – including anxiety, adjustment to college, depression, stress, misuse or abuse of alcohol or other drugs, and other issues – is available to all full-time students at no charge. Counseling is provided on a short-term basis by licensed professionals who understand the special needs of university students. Referrals to area agencies and practitioners are made for those who need more specialized or long-term care. Students are encouraged to make appointments in advance through the Student Life Office by calling ext. 2868 or sending an email to [counselingservices@philau.edu](mailto:counselingservices@philau.edu).

Students experiencing more urgent concerns are directed to use the Drop-In Hour, 4 to 5 p.m. each weekday during the regular academic year. All information shared with counselors is held in strict confidence, as long as there is no clear and imminent danger to the student or others.

## **DINING SERVICES**

*215.951.2924*  
[diningservices@PhilaU.edu](mailto:diningservices@PhilaU.edu)

The Ravenhill Dining Hall provides students with a large variety of meal selections, including many healthy choices, with unlimited seconds for students dining in. It features creations from all over the world at Bravisimo, fresh dough pizzas from Pepperazzi's, delicious fresh salads and mouth-watering sandwiches from the Deli, as well as fresh-stock soups and favorite home-cooked foods.

Ravenhill Dining Hall is open regular hours during the day Monday through Friday, serving breakfast from 7:15 to 10:15 a.m., continental breakfast from 10:15 to 11 a.m., lunch from 11 a.m. to 2 p.m., lite lunch from 2 to 4:30 p.m. and dinner from 4:30 to 7 p.m. On the weekends, it is open for brunch from 10:30 a.m. to 2 p.m., lite lunch from 2 to 4:30 p.m. and dinner from 4:30 to 7 p.m. Ravenhill operates Sunday to Thursday as a retail Late Night options and lounge offering "On-the-Go!", pizza, milkshakes, street foods and sweets.

The Kanbar Campus Center houses two dining locations. The Common Thread, located on the lower level, offers fresh burgers and hand-cut french fries, Philadelphia cheesesteaks and other favorites at the grill. The deli offers whole roasted turkey and roast beef, along with other deli favorites and sides. Homemade fresh-stock soups, baked pastas and entrées cooked to order also are available. Ted's, located on the main level, offers "On-the-Go!" and convenience items in the store, as well as fresh dough pizzas, hot subs, Starbucks coffee, ice cream and fresh baked products. Ted's is open continuously Monday through Friday from 7:30 a.m. to midnight, and noon to midnight on Saturdays and Sundays. Common Thread is open from 8 a.m. to 7 p.m. Monday through Thursday, and 8 a.m. to 2:30 p.m. on Friday.

The Tuttleman Cafe, located in The Tuttleman Center, offers coffee and lite fare. It is open 7:45 a.m. to 6:30 p.m. Monday through Thursday, and 7:45 to 2:30 p.m. on Friday.

All students living on campus, with the exception of those residing in the townhouses or apartments, are required to purchase a meal plan. Commuting, townhouse and apartment students may purchase a meal plan or use the dining facilities on a cash basis.

## **DISABILITY SERVICES**

*The Office of Disability Services is located in The Kanbar Campus Center, Suite 102.  
215.951.6830*

Any student with a documented disability, including a physical impairment, learning disability or psychological disability, is eligible for services and reasonable accommodations. Accommodations include, but are not limited to, extended time for testing, distraction-free testing environment, note takers, electronic format textbooks, reduced course load, assistive technology and adaptation to physical facilities. For more information, call 215.951.6830.

## **HEALTH SERVICES**

*The Student Health Center is located in Scholler Hall, lower level.  
215.951.2986*

*Contact the Business Office at 215.951.2960 to purchase University health insurance.*

The Student Health Center is open weekdays during the academic year to provide assessment and treatment of minor illnesses and injuries. All full-time undergraduate students and international students pay an annual fee that entitles them to access the Student Health Center as often as needed. Other students may opt to utilize the services by paying the semester Student Health Fee. Arrangements to pay the fee can be made by visiting the Student Health Center.

Students are responsible for lab fees and prescriptions costs. Students who require additional or alternative treatment may be referred to local providers at their own expense.

Students are encouraged to visit during Walk-In-Hours (M-F 9:30 a.m. to 12:30 p.m.). Staffing includes an administrative assistant and board-certified nurse practitioners who are available to assist in meeting students' confidential health care needs. Please note that confidentiality may be broken if the student is considered to be a danger to self or others.

The Student Health Center waiting room has health-related reference materials and pamphlets, as well as a Self-Care Station stocked with common over-the-counter medications. Students may obtain these supplies during office hours.

All full-time day undergraduate students are required to submit a completed health form that includes a medical history, recent physical exam and documentation of the required immunizations and testing. Forms are available in the Student Health Center and must be submitted prior to attending classes as a new or returning student. The University reserves the right to deny housing, to deny preventative-care services or to withhold registration for any student who does not meet the pre-matriculation requirements.

All full-time students are required to be covered by a medical insurance policy. Full-time day undergraduate students and all international students are required to present proof of adequate insurance at the beginning of each academic year. In adherence to immigration laws, all international students must demonstrate minimal standards of adequate health insurance. Insurance will be considered adequate if the coverage is for the academic year and the carrier is licensed to do business in the United States with a U.S.-based office and telephone number. This information must be provided to the Student Health Center by the second Friday in September (fall semester) or the first Friday in February (spring semester). If documentation of adequate health insurance is not provided, the Business Office reserves the right to charge the appropriate health and accident insurance fee to the student's account.

It is each student's responsibility to ensure that they are covered either through private insurance or through the University-sponsored health insurance plan. To purchase the University-sponsored plan, students may contact the Business Office at 215.951.2633. Any changes in insurance coverage should be reported to Student Health Services.

## **INTERNATIONAL STUDENT PROGRAMS**

*The Office of International Student Services is located in The Kanbar Campus Center, Suite 102.  
215.951.2660*

[www.PhilaU.edu/international](http://www.PhilaU.edu/international)

The University has a long history of educating students from all over the world, representing nearly 40 different countries. The Office of International Student Programs implements two orientation programs a year for undergraduate and graduate international students. The Office also provides ongoing support in terms of immigration advising, work permission paperwork, and educational and recreational programming. The director also serves as the adviser to the International Student Association (ISA).

More information and resources are available in the director's office where business and social information for new international students can be found.

Upon arrival, all international students, including transfer students, must report to the director's office, located in Suite 102 of The Kanbar Campus Center.

## **OFFICE OF THE DEAN OF STUDENTS**

*The Office of the Dean of Students is located in The Kanbar Campus Center, Suite 321.  
215.951.2740*

The Office of the Dean of Students oversees all departments in the Division of Student Life and serves as an advocate for students in the development of University policy. The Office is also responsible for administering the University code of conduct (judicial policies).

## **RESIDENCE LIFE**

*The Office of Residence Life is located in The Kanbar Campus Center, Room 311.  
215.951.2741*

The Office of Residence Life is comprised of a diverse staff committed to building a safe, welcoming environment that fosters an appreciation for differences and empowers students to become lifelong citizens of their communities. We accomplish these goals by providing quality educational experiences, exceptional customer services and advocacy for service on behalf of our students with other University departments. Through these efforts our staff is determined to provide resources and services that enhance our resident students' academic endeavors.

The Office of Residence achieves its mission by establishing the following learning goals for resident students:

1. To promote self-awareness to foster a greater knowledge of self.
2. To promote awareness of difference while increasing knowledge and appreciation of others.



3. To empower students to become more action-oriented.

The University provides on-campus housing for approximately 1,600 undergraduate students in traditional and apartment-style residence halls. First-year students are housed primarily on the Ravenhill Campus, while returning and upper-class students are housed on the Main Campus and the Residences at Falls Center. Housing on the Ravenhill Campus consists of four residence halls: Fortess Hall, Mott Hall, Partridge Hall and Ronson Hall. Students reside in rooms accommodating one to four students with community bathrooms in each building.

Housing on the Main Campus consists of three apartment complexes: Independence Plaza, the Townhouses and one residence hall, the recently renovated Scholler Hall. The apartment-style units range from one to five bedrooms, accommodating two to five people. Each air-conditioned unit contains a full kitchen, living room and bathroom. Scholler Hall is a traditional residence hall with double-occupancy rooms. In addition, upper-class students are housed in the Residences at Falls Center, a newly renovated open concept independent apartment-style living, which is located on Henry Avenue. The University provides shuttle service from the Residences at Falls Center to Main Campus.

Each resident is provided with an extra-long bed, desk, desk chair and dresser/wardrobe unit. In addition, one data port is provided for each resident. At least one cable connection with basic service is provided for each room or apartment. Apartment-style units are additionally furnished with living room and kitchen furniture as space permits.

Recognizing that students spend a significant amount of their time outside of the classroom setting, the Office of Residence Life strives to create a group-living environment in which each student is afforded an opportunity to develop as an individual in an atmosphere that encourages emotional and intellectual growth.

The environment within a student's residence area significantly influences his/her success and personal satisfaction while at the University. Each resident contributes to making residential living a positive experience. A sense of community is achieved through mutual consideration, cooperation and responsible behavior. Community living places responsibility on the individual for self-discipline and an awareness, becoming more aware of their needs as members of the community and to become more action-oriented in the residential community.

Each residence area is supervised by a Residence Life staff member. Residence Coordinators (RCs) and Resident Assistants (RAs) work with students to develop a sense of community in their residential area, and create an atmosphere conducive to mutual respect and consideration. Residence Life staff members are also instrumental in assisting students to develop positive attitudes and behavior to deal responsibly with the establishment of an independent lifestyle and the social freedoms of adult life.

## **STUDENT ACTIVITIES**

*For information on the Campus Activities Board, contact the Department of Student Activities in The Kanbar Campus Center, Suite 301.  
215.951.2744.*

The Student Activities Program at the University serves a vital role in enriching the quality of life on campus. The program offers the opportunity for the development of lifelong skills, and serves as the conduit for diverse ideas, cultures, lifestyles and experiences. The various components of the student activities area are housed in the Student Center.

The Student Government Association (SGA) is an independent, self-governing student group that includes President's Council, a body that consists of representatives from all recognized student clubs and organizations.

In addition to the basic responsibility of protecting students' rights, the SGA recommends students to University-wide committees, addresses student grievances and sponsors campus-wide events.

The Campus Activities Board is the major social programming organization on campus. Its responsibility is to provide a wide variety of special, scholastic, cultural, educational and entertainment-based programs open to the entire campus community.

In addition to the SGA and the Campus Activities Board, there are approximately 70 social, cultural, professional, religious and special interest clubs and organizations at the University. Philadelphia University has one national social fraternity and one national social sorority, along with the professional fraternities Phi Psi (Textile) and Delta Sigma Pi (Business).

## STUDENT DEVELOPMENT PROGRAMS

*The Office of Student Development Programs is located in the Kanbar Campus Center, Room 317.  
215.951.2634*

[studentdevelopment@PhilaU.edu](mailto:studentdevelopment@PhilaU.edu)

Student Development Programs houses the First Year Experience Program and the offices of Community Service Learning and Spiritual Development. Collectively, our programs and services support the mission of Philadelphia University and promote and engage students' thoughtful and creative contributions by: coordinating students' transition to the institution and ensuring the highest-quality first-year experience possible; creating links between the curriculum and co-curriculum; focusing on student leadership development; promoting citizenship through community service initiatives; exploring one's sense of purpose and meaning through spiritual development; and deepening students' awareness of self, others and the wider world through intercultural exchanges.

**First Year Experience (FYE):** In partnership with Academic Affairs, Student Development Programs coordinates campus-wide efforts to ensure the highest-quality experience possible in the first year of college. The central theme of the FYE components is **Finding Philadelphia**, learning about the history, culture, diversity and wealth of activities in the city, our extended campus. Our comprehensive approach to your first-year experience begins with START and New Student Orientation, which includes the Summer Reading, integrates both your curricular and co-curricular experiences, includes faculty-oriented academic advising, and is centered on your residential community. The First-Year Experience Program at Philadelphia University is designed to provide support and encouragement for new students. FYE acknowledges that the first year in college is a major life step during which students face challenges in adjusting to a new place, managing time and workload, starting new relationships, clarifying values, establishing autonomy and addressing a host of other developmental issues. Philadelphia University has committed an extensive amount of time and resources to provide a sound foundation for success for each student.

**Community Service-Learning:** Philadelphia University believes that community service initiatives are a central part of the undergraduate experience. Accordingly, the Office of Community Service Learning works to increase student access to service opportunities, serves as an informational resource about community agencies, supports student's civic engagement, and promotes service as a tool for learning. Our goal is to develop students into community-conscious leaders who have an active and engaged relationship with the city of Philadelphia, surrounding neighborhood and the broader context of society.

**Spiritual Development:** The Office of Spiritual Development offers opportunities for students as they seek to deepen and enhance their spiritual and religious lives. These include: counseling that addresses questions of spirituality and religious faith and its application to issues and challenges at school and home; small groups for students wanting to explore their spiritual lives; workshops on spiritual development, meditation and prayer; interfaith services and discussions; holy day observances and special event celebrations. The Office provides a listing of places of worship offered by local faith communities. Information about different religious traditions and holy days is also available.

## University Academic Resources and Services

### PAUL J. GUTMAN LIBRARY

[www.PhilaU.edu/library](http://www.PhilaU.edu/library)

The 54,000-square-foot, 400-seat Paul J. Gutman Library blends a traditional book and journal collection with an extensive electronic environment. Through its website, the library delivers a wide range of information resources to members of the University community on and off campus. Electronic resources include: Avery Index to Architectural Periodicals, Art Index, EBSCO, S&P's NetLibrary, Hoover's, LexisNexis, ProQuest, MD Consult, JSTOR Stylesight and many more. These online databases and electronic book, newspaper and journal collections offer students convenient 24/7 research and study access to a continually expanding world of knowledge and information.

The availability of electronic resources, including 42,000 online journals, supplements a book collection of more than 150,000 volumes, with special emphasis in the areas of art and architecture, design, textiles, sciences and business. The Gutman Library Special Collections Department maintains one of the largest collections in the United States devoted to the history of the textile industry. A contemporary reading collection of best sellers and popular materials is also available. Other print publications include 450 current journal, trade and newspapers subscriptions. Materials not available in the Gutman Library collection can be obtained through an interlibrary loan network linking more than 14,000 libraries around the world, or through EZBorrow, a self-service loan system for books from over 50 of Pennsylvania's largest academic libraries.

The award-winning Paul J. Gutman Library building provides individual study carrels, seven group study rooms, more than 80 PCs and Macs for individual or collaborative work, and student lounge areas. Wireless access in Gutman allows students to use personal or library-provided laptops or iPads at any location in the building. To help students become effective and efficient researchers, librarians work with faculty to educate students about the resources available and the most effective ways of accessing and using them. Classroom presentations and one-on-one hands-on instruction are aimed at creating an information-literate student body.

### THE ARLEN SPECTER CENTER FOR PUBLIC POLICY

The Arlen Specter Center for Public Policy fosters greater understanding of political science, government and history through research, educational programming and exhibitions inspired by Senator Arlen Specter's career, and reflected in the permanent collection of the Senator's historic papers.

Managed by the Paul J. Gutman Library, the Center will preserve, organize and provide access to the rich and deep collection of resources from the Senator's Archive. The Center will also sponsor programming around relevant public policy and educational topics to benefit the local university community and the public. The future home of the Arlen Specter Center for Public Policy is the historic Roxboro House.

### INFORMATION LITERACY

*Information Literacy Mission:*

To help students become "wise information consumers" and lifelong learners, by developing in them the abilities to effectively find, evaluate and apply information.

*Information Literacy Learning Outcomes*

Philadelphia University's Information Literacy program includes six overarching outcomes for all students.

1. When confronting information-based problems, students will identify and clearly articulate their information needs in order to fill the information gap.
2. Students will generate a continuously-expanding knowledge base of information sources and resources that are relevant to their information needs, including a variety of formats and delivery mechanisms.
3. When solving information-based problems, students will deliberately and critically evaluate and apply the most appropriate information, information sources, resources and information technologies to solve the problem.
4. When solving information-based problems, students will demonstrate ethical application of information and will use information sources, resources and information technologies in an ethical manner.
5. Students will use appropriate information sources, resources, and information technologies to effectively engage with global cultures.
6. Students will exhibit the perseverance and self-direction characteristic of lifelong learners, as supported by information literacy.

#### *Information Literacy Description:*

Information literacy is embedded in the curricula and programs of each college. Students are exposed to information literacy concepts in the context of both their major and College Studies courses. Students learn how to use the information resources and technologies relevant to their lives as scholars on campus and as professionals in the field. Throughout their undergraduate careers, students gain practical experience in the critical application of data and information to various information needs and problems.

The 21st-century workplace recognizes the value of information-literate employees. Today's technology and knowledge-driven economy demands highly-skilled workers who are adaptable, resourceful, intrinsically motivated and able to learn. Through the University's efforts to create information-literate graduates, students engage in the same process of information problem solving that will continue for the rest of their lives.

Information Literacy at Philadelphia University is a collaborative, campus-wide effort involving classroom faculty, librarians, the University Writing Program, technology and computing support, and University administrators. Faculty, administrators and librarians work together to incorporate Information Literacy into programs, courses and assignments, and to assess stated Information Literacy Learning Outcomes. Librarians also support students, faculty and staff as they seek to become information literate, lifelong learners.

## **HONORS PROGRAM**

### *Honors Program Mission*

The mission of the Honors Program is to provide fertile spaces for students to develop as leaders in the local and global intellectual marketplace. In alignment with the University value of integrative learning, the program facilitates partnerships with other academic and student development units that promote active inquiry, compelling discussion and transformative thinking.

### *Honors Program Learning Outcomes*

At the completion of the honors program, students will be able to:

- Create and execute research questions worthy of graduate study or professional conference presentation.
- Articulate complex ideas across disciplines and with industry professionals.
- Demonstrate competence in identifying the core and layers of an issue.
- Create opportunities for innovative strategies.
- Use existing knowledge as a basis for deeper or broader inquiry.
- Analyze personal and professional challenges and employ appropriate responses.
- Evaluate issues from multiple sensitivities.
- Recognize and assess the interdependence of economic, cultural and political issues

### *Honors Program Description*

The Honors Program brings together highly motivated students and dedicated faculty in a curriculum that is both challenging and supportive. The program reaches beyond professional or specialized study to inspire students to a lifetime of broad intellectual curiosity, self-sustained inquiry and personal growth. It develops critical thinking, leadership skills and awareness of global issues.

A combination of enriched courses and co-curricular activities, the program is designed to challenge the best students at the University. Faculty and students join in a common intellectual and social venture, share an openness to new ideas, commit to the energetic pursuit of excellence and nurture the complete development of the individual. In each course, faculty attempt to foster a climate in which individual differences contribute richly to a common pursuit of learning.

The honors program is a curriculum satisfied through seven honors-level courses in College Studies and the major, and could include honors projects abroad, specialized research, independent study or leadership roles in community service. Honors scholars must complete the Honors level COLLST-499 Contemporary Perspectives capstone course during their senior year.

## **THE LEARNING AND ADVISING CENTER**

The Learning & Advising Center is the primary resource for students at all levels who wish to get the most from their academic experience at Philadelphia University. We are a “one-stop shop” offering free tutoring in all Philadelphia University courses, with a staff of professional tutors for writing, math and study skills, and trained peer tutors for content areas.

We provide academic advising for first-year and transfer students. Advisors are full-time faculty representing all the schools and majors at the University. Go to [www.philau.edu/learning](http://www.philau.edu/learning) for more information and schedules for tutoring and first-year advising.

### **Academic Advising Mission**

The first-year advising program at Philadelphia University instructs students in how best to use and appreciate the resources of the University in order to meet their educational and professional goals. Advisors provide opportunities and assist students to make decisions that are consistent with their

abilities and interests. Deliberate and intentional academic advising guides students in setting goals, making choices, collaborating with others and valuing the contribution of higher education to real-world problem solving.

### *Academic Advising Learning Outcomes*

Students will:

- Value the role of the academic advising process in their university learning experience.
- Make sound decisions concerning degree and career goals based upon their abilities and interests, and University policies and procedures.
- Develop an educational plan for successfully achieving their goals.
- Appreciate collaboration with others across programs and disciplines and including the college studies curriculum.
- Use campus resources and services to assist them in achieving their academic, personal and career goals.

### *Academic Advising*

Academic advisors assist students in meeting their educational goals and utilizing campus resources. The Learning and Advising Center provides advising for first-year students in the day division including students in University College: Discover it yourself (DIY), a program for students who have not declared their major. Upper-level, day-division students who have declared their major are assigned advisors in their schools. An important tool for advisors is the Academic Alert Program through which faculty provide advisors with information regarding students' academic performance.

The School of Continuing and Professional Studies advises Continuing Studies students. The office maintains regular evening hours. In addition, students may seek advising via telephone or email.

### *Majors Advising*

DIY students who have not yet declared a major or students who are thinking about changing their major are encouraged to meet with their DIY advisor or the Associate Director of the Learning and Advising Center for specialized advising. Students also are encouraged to make one-on-one appointments with the staff of the Career Services Center in order to participate in career inventories and assessments so that they may choose a major that links their interests with their skills and abilities. Students will be advised to discuss possible majors, and to talk with appropriate professionals on campus about the fields they are considering.

Students who wish to explore possible majors may keep their options open during their first year at the University. Students who choose not to declare a major must work closely with and participate in all DIY programming sponsored by the Learning and Advising Center and the Career Services Center. Undeclared students are encouraged to work intensively with their academic advisors to select courses that will help them to prepare to enter a specific major. Undeclared students are encouraged to declare a major after they have completed 30 credits. Students are required to declare a major after they have completed 60 credits.

## **TUTORING SERVICES**

### *Tutoring Services Mission*

The tutoring program at Philadelphia University provides opportunities and assistance for all students to develop the writing, quantitative, content-based learning and critical thinking strategies required for

both academic and professional success. Our tutoring staff, comprised of trained peer and professional Nexus Learning practitioners, forms supportive relationships with students, assisting them to practice the active, collaborative and real-world learning strategies they will use when navigating the evolving global marketplace.

### *Tutoring Services Learning Outcomes*

Students will:

- Use resources and opportunities provided by the tutoring program to improve their abilities to learn and achieve academic and professional success.
- Exhibit comprehension about how they learn
- Articulate the methods used to achieve their learning goals
- Demonstrate study strategies that lead to academic success
- Appreciate the value of the university resources that provide academic assistance

Free professional and peer tutoring are available to all Philadelphia University students who wish to improve performance or maintain high grades in a variety of subject areas. Students work one-on-one or in small groups with professional or peer tutors. Workshops are offered in areas such as time management, note-taking, test-taking strategies, and other study strategies. Review sessions and disciplinary specific workshops target skills needed for particular courses. All of these services are available at no cost to Philadelphia University students. Go to [www.philau.edu/learning](http://www.philau.edu/learning) to find an updated tutoring schedule for each semester.

Included in the Learning and Advising Center are the following tutoring services:

- **Professional and peer tutoring** is available for all levels of math courses.
- **Writing assistance** is available at all stages of the writing process, from help with organizing ideas and getting started on papers to revising final drafts. Specialized help is also available for writing research papers and for problems with documenting sources, grammar and punctuation.
- **Study Skills/Test Taking Strategies:** Specialized help is available for students who want to read, study and take tests more effectively.
- **English as a Second Language:** Students speaking English as a second language can receive both specialized professional help and student assistance in coursework and general language skills.
- **Peer Tutoring:** Peer tutoring related to specific academic courses is offered by fellow students experienced in the subject. Students are recommended by faculty and trained in learning techniques.

## **STUDY ABROAD**

The Study Abroad program provides students the opportunity to participate in international experiences that support their personal, academic and professional development. While abroad, students take courses toward their degree and develop a professional awareness of their discipline in a global context. Students may study abroad for one semester, a full academic year, on a summer program, or on a faculty-led “short course” during the winter, spring or summer term.

### *Learning Outcomes*

Study Abroad enriches the PhilaU educational experience by organizing programs that allow students to:



- Appreciate the interdependence of the global environment.
- Demonstrate the knowledge of international economic and/or cultural developments in their field and/or particular area of interest.
- Value intercultural experience.
- Develop an ethical and professional awareness of their discipline within the global community.
- Gain insights into the historical, cultural, social, political, geographic and environmental contexts of the site of study.
- Apply their resourcefulness, flexibility, and independence and the ability to collaborate and work together.
- Seek another opportunity to travel abroad.

The Study Abroad Office provides individualized attention to each student, reviews their academic needs and career goals and advises on program options. To ensure students stay on-track for graduation, students must have all study abroad courses reviewed and approved by their Academic Advisor/Program Director and Study Abroad Office during the application period. Only pre-approved courses and credits taken abroad will be accepted by Philadelphia University and reported on a student's Philadelphia University transcript.

Students have program options all over the world: Italy, England, Scotland, France, Spain, Denmark, Australia, New Zealand, China, Japan, etc. In Italy, students can participate in one of Philadelphia University's own study abroad programs: Philadelphia University's Center for Architecture and Fashion at UARC (University of Arkansas Rome Center) in Rome and Philadelphia University's Center for Design at NABA (Nuova Accademia di Belle Arti) in Milan. For more information on study abroad programs, the application process, deadlines and requirements, please contact the Study Abroad Office or visit their website: [www.philau.edu/studyabroad](http://www.philau.edu/studyabroad).

#### *Basic Requirements for Study Abroad*

- Foreign program must be approved by the Study Abroad Office
- Completion of the online study abroad application and all supporting materials (Letters of recommendation from two faculty members, essay questions and course approval from Academic Advisor/Program Director)
- Interview with either the Director or the Coordinator of Study Abroad
- Certification from the Office of Student Life that the student is not on disciplinary probation
- Completion of 60 credits prior to departing for a summer/semester/year-long program. (The completion of 60 credits may apply for participation in short courses, see guidelines by course.)
- A minimum cumulative GPA of 2.5 (Please note: many foreign institutions may require a higher GPA of 2.75 or 3.0)

Additional documents and/or a portfolio of work may be required and will be noted on the Study Abroad application.

#### **TECHNOLOGY RESOURCES INFORMATION TECHNOLOGY**

215.951.4648

*For technology support visit the Technology Help Desk, second floor, Search Hall or call 215.951.4OIT (x4648) or email [HelpDesk@PhilaU.edu](mailto:HelpDesk@PhilaU.edu).*

Technology is at the heart of much of what happens at Philadelphia University. In fact, a sophisticated technological infrastructure supports the entire University community. The network provides high-speed wired (100 megabit and gigabit) and wireless (a,b,g,n) service throughout campus from residence halls and administrative offices to classrooms and labs. The University network and email systems support smart phones, tablets and gaming consoles.

The campus has nearly 1,150 University-owned desktop computers connected to the network. Through the Microsoft Live@edu service, each student receives an email account that includes 20 GB of mail space. A number of academic programs, such as graphic design, digital design, industrial design and architecture, are assigned enhanced network storage space. All students are provided with 1 GB of network drive space and 20 GB of SkyDrive storage through live@edu. Students are also provided with space for hosting their own University-related website.

Philadelphia University is a technology-rich environment. Both the departmental and general-purpose computing labs provide an extensive array of software applications including AutoCAD, 3dsmax, Cinema 4D, Rhino and Sketch-Up. Industrial and digital design students are required to use applications such as Final Cut Suite, Maya, SolidWorks, and Adobe titles such as Creative Suite, Photoshop, Illustrator, InDesign, Acrobat and After Effects. Desktop computing equipment in these specialized programs is on an aggressive migration cycle that provides hardware upgrades and new equipment every 24 months.

Philadelphia University requires that all incoming students have a laptop for use on campus and especially in all classrooms, studios and labs. Please refer to the OIR website for the most updated requirements.

## **WEBADVISOR**

WebAdvisor is a web-based information-management tool that allows Philadelphia University students, staff and faculty to access numerous online resources. Using WebAdvisor, prospective students can view application status and find financial-aid information. Enrolled students can review course schedules, check account status, check grades and register for classes. Faculty can monitor rosters, post grades and review advisee information. Staff can manage departmental budgets.

The University supports the Blackboard course-management system. This tool provides faculty and students with online and supplemental course materials through the Web. The integration of technology into curriculum is a strategic campus goal.

The Office of Information Resources (OIR) provides a broad range of support for faculty and students including a comprehensive Technology Help Desk operating nearly 100 hours per week, a team of analysts devoted to desktop and computing lab support and resources delivered from more than 60 enterprise servers operating around the clock.

## **THE TEXTILE COLLECTION AT THE DESIGN CENTER**

The Design Center houses the University's extensive historical textile and fashion collection. The collection – which includes 200,000 items – is a nationally-recognized resource for the study of American, European and non-Western textiles from the first century AD to the present. It is also the only comprehensive repository of 19th- and 20th-century industrial fabric samples in the United States, documenting a broad range of styles and techniques, and serving as a critical resource for research on American commercial and industrial design. Access to the collection is available through class tours and

individual or industry related research. The textile collection and The Design Center are intended to be collaborative; developing partnerships through academia and industry.

## **UNIVERSITY COLLEGE: DISCOVER IT YOURSELF (DIY) PROGRAM**

### *DIY Mission*

The mission of the DIY program is to provide structured support and guidance for first-year students who are undecided about their program of study at Philadelphia University and have not declared a major. Facilitated jointly through the Learning and Advising Center and Career Services, the DIY program provides special co-curricular programming that bring students together to explore their goals and connect their interests with academic opportunities at Philadelphia University.

### *DIY Learning Outcomes:*

Through their participation in University College, DIY students will:

- Improve their knowledge of the programs, courses and curricular offerings at Philadelphia University
- Gain insights into the career opportunities and pathways available through programs of study at Philadelphia University
- Develop self-awareness to support informed decision-making
- Discover their interests, goals and opportunities at PhilaU

### *DIY Program Description*

*University College:* DIY program is a supportive community that provides structured guidance and encouragement to help DIY students make an informed decision about their choice of major in the first year. Through special programming, DIY students use their first two semesters to explore their educational and career opportunities, to learn success strategies for college, and to navigate the resources, courses and programs at PhilaU.

Students in DIY explore their interests through course work, advising and workshops. Students will be able to choose their introductory major courses from thematic groupings that introduce topics and issues relevant to particular professional major programs. DIY students are assigned a special DIY academic advisor, and a unique advising syllabus for DIY students defines co-curricular activities and workshops taught by Learning & Advising and Career Services that help students identify their interests, personal strengths and career aspirations.

Students also engage in activities to learn more about the professional majors through class visits, meetings with upper-level students, and special discussions with program directors with the goal of gathering information about what it is like to study in a particular major and where it may lead after college.

For more information about the DIY program on the Philadelphia University website.

## **WRITING ACROSS THE CURRICULUM**

### *Mission*

The Writing Program enacts Philadelphia University's commitment to fostering strong writing skills so that students will be able to communicate well both in their lives as college students and later as professionals and citizens.

### *Learning Outcomes*

As a result of the Writing Across the Curriculum Program, students will be able to:

- Articulate and evaluate the purpose, audience and context of written work
- Recognize and assess their own multi-step writing process

- Use writing to foster inquiry
- Demonstrate fluency in disciplinary conventions

*Program Description*

Philadelphia University recognizes the vital role of written communication in college, the workplace and in the community. All undergraduate students take courses in the Writing Program, which includes a wide range of academic and professional writing and is integrated throughout the institution's professional majors and the general education core.

Before graduating, all Philadelphia University undergraduate students must complete two writing-specific courses and four courses designated in the University Catalog as writing-intensive (WI). In addition, students are also required to complete numerous and diverse writing assignments in courses, studios and labs that carry neither the writing-specific nor the writing-intensive designation. Professional writing tutors in the Learning & Advising Center support students in all subjects and at all levels of the curriculum.

# Undergraduate Academic Programs

## OVERVIEW

Programs at Philadelphia University offer a unique education that dynamically integrates liberal and professional education within an active and engaged learning environment. The curricula seek:

- a) to advance students' knowledge and abilities
- b) to broaden students' ways of thinking
- c) to enhance students' awareness of the ideas, practices and values of their own and other cultures
- d) to prepare students to synthesize general and specialized knowledge and apply it to a full personal and professional life

The academic programs offered at Philadelphia University are administered by the College of Architecture and the Built Environment; the Kanbar College of Design, Engineering and Commerce; the College of Science, Health and the Liberal Arts; the School of Continuing and Professional Studies; the Office of Student Development Programs; and the Department of Physical Education. The academic programs and areas of study for each college, school or office are outlined in the next section.

## ASSESSING STUDENT LEARNING

Philadelphia University is committed to providing excellent and innovative educational opportunities for all students. In order to maintain this quality and assure that students are learning all that they should, the University takes its responsibility for assessment seriously. The assessment of student learning occurs at all levels of the curriculum and is a central aspect of measuring institutional effectiveness. Learning outcomes identified for each course, year-level and program are evaluated on a regular basis and the data is used to ensure the continuous improvement of the curricula, programs and the efforts of faculty to increase student attainment. Students may be required to provide faculty with representative examples or copies of their work, at various points in their curriculum, in order for faculty to evaluate achievement of programmatic learning outcomes.

All curricula at Philadelphia University combine theory and application and offer integrative and active learning experiences for students. Assessment helps faculty in understanding how well students are achieving these outcomes and reflects the commitment to the importance of learning through active engagement. Assessment also helps to ensure that the University's programs meet the institutional learning outcomes and fulfill the University's mission to provide students with a distinct balance of liberal and professional education.

### Institutional Learning Outcomes

All Philadelphia University graduates will:

1. Possess a breadth and depth of professional skills informed by the liberal arts and sciences.
2. Apply multi-disciplinary and collaborative approaches as a means of succeeding in dynamic, complex career environments.
3. Integrate theory and practice to inform research and guide creative decisions in their professional fields.
4. Interpret and value diversity in both local and global communities.
5. Be prepared to be ethically responsible citizens in the personal, professional and civic spheres.
6. Be prepared to bring innovation to their fields and anticipate future directions in their professions by adapting to social, environmental and economic change.

Graduate students meet these outcomes, but demonstrate learning at a higher level.

The assessment of student learning occurs at all levels of the curriculum and is a central aspect of measuring institutional effectiveness. Learning outcomes identified for each course, year-level and program are evaluated on a regular and consistent basis as part of the assessment plans for each program. The process seeks to explore teaching-learning connections and informs changes to curriculum to ensure the continuous improvement of University programs through the efforts of its faculty.

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Graduate students meet these outcomes, but demonstrate learning at a higher level.

### **BACHELOR'S DEGREE COMPONENTS**

#### **College Studies**

The general education core program at Philadelphia University is designed specifically for professionally-oriented students. Technological change, economic shifts and increasing interdependence demand a strong grounding in liberal education, as well as professional and technical expertise. All students in the University take the common liberal arts education sequence called the College Studies Program. Study in the liberal arts and sciences develop the strategies to be an integrative thinker who can see connections in a wide range of knowledge and across disciplinary boundaries. Through exposure to complex, real-world issues, and studies in history, humanities and the social sciences, mathematics and the natural and physical sciences, students become graduates who are well-read, well-spoken, worldly, flexible and adaptable – individuals who never stop learning and making connections in everything they do.

The College of Science, Health and the Liberal Arts has responsibility for courses in the College Studies program, promoting the best of a strong liberal arts and sciences tradition integrating with the professionally oriented curriculum. Students' progress through a carefully constructed four-year sequence, making connections between disciplines and viewing their own fields of choice through social, economic, political and cultural lenses. College Studies forms the backbone of every undergraduate student's major, bringing classmates together to share a common educational experience and to learn from each other's diverse perspectives. All students at the University take approximately 40 percent of their coursework in College Studies.

## **Professional Studies**

Strongly integrated with general education, the course of study in each professional major broadly prepares students to engage with the professional world and inquire about its political, economic and social contexts through the perspective of their practices. Professional studies provide the knowledge and skills to be successful in a profession, and to become lifelong learners, able to adapt to the changing conditions and demands of their careers.

## **Minor**

A minor is a set of courses that provide enhanced study in a particular subject area. A student may choose a minor with the assistance of an academic advisor upon completion of 60 semester hours. Options for minors are determined by the academic program and consist of a minimum of twelve credits in the subject area. A student may not use the same course for credit in both the major and the minor areas. For more information see, “Minors and Concentrations” section of the catalog.

## **Concentration**

A concentration allows for an in-depth exploration of a focused area within the scope of the student’s major discipline. Concentrations are available for study by majors within the appropriate area only. Options for concentrations are specified by the academic program. Similarly, the number of credits required to complete the concentration and the sequence and selection of required and elective courses are determined by the program. For more information see, “Minors and Concentrations” section of the catalog.

## **Designated Electives**

Designated electives allow students to select a course from a pre-approved set of courses. Designated electives enable both freedom of choice with some degree of programmatic guidance.

## **Free Electives**

Free electives allow students to tailor their degree program to meet their personal and educational goals. Students who participate in an internship may use these credits to partially satisfy the free elective requirement.

## **SERVICE LEARNING AND PHYSICAL EDUCATION**

A one-credit service learning course or a two-semester sequence of physical education is required of all day division students.

### *Service Learning*

Community service initiatives are a central part of the undergraduate experience at Philadelphia University. SERVE 101, a one-credit course, provides an opportunity for students to contribute to and learn from Philadelphia, its neighborhoods and people. These experiences allow students to explore their interests and expand their knowledge through a hands-on project with a community outside of the University.

### *Learning Outcomes for Service Learning*

Students who have completed Serve 101 will:

- Develop a sense of responsibility and commitment towards public service and citizenship through critical reflection and action.
- Improve their understanding of societal problems that affect members of the Philadelphia area community and beyond.

- Relate community service experiences and issues to assigned journal questions and readings.
- Develop a commitment to full participation in the life of their communities.
- Consider civic obligations as a professional to improving quality of life of communities.

SERVE 101 is part of an initiative in the University called “Serving and Learning in Philadelphia,” a phased program in the curriculum that provides opportunities for students to apply their classroom education to real-world settings. The initiative encourages the development of students as active citizens and professionals by supporting the ways they contribute to their communities and develop personal and professional responsibility. Go to [www.PhilaU.edu/community/forfaculty.html](http://www.PhilaU.edu/community/forfaculty.html) for more information.

### *Physical Education*

Physical education course options offer a variety of activities, which include traditional instruction, making it possible for students to fulfill this requirement in a constructive and enjoyable manner.

PE options are PE 00-Varsity Athlete, and/or PE 02 Recreation & Wellness

## **ACADEMIC INTERNSHIPS**

Academic internships at Philadelphia University aid students in professional preparation through a work experience directly related to their major and career goals.

Academic internships may be taken for credit and are completed as an elective with a course syllabus focused on professional skill-building and written assignments. While the primary emphasis of the course is on the internship work experience, course assignments are incorporated to prompt reflection on the internship. This reflection is an integral component of experiential learning and students’ overall career and professional development.

The Career Services Center and designated Faculty Internship Advisor (FIA) from the student’s major provide support and guidance during the semester of participation. Career Services staff is also available to assist students with internship search strategy prior to the internship.

At the conclusion of the internship semester, all students are evaluated both by their employer and FIA, receiving a grade derived from successful performance as determined by the employer, the quality of academic assignments submitted to faculty and completion of minimum required hours. All internships, regardless of credit registration, are a minimum of twelve weeks in length.

Academic internships are offered during the fall, spring and twelve week summer terms. The deadline to register for academic internships is the last day to add classes for the semester of intended participation. The last day to add classes is established each semester by the University Registrar’s Office (refer to the academic calendar for specific information). Students are strongly encouraged to apply early and contact Career Services for assistance, providing the best success in finding an appropriate experience in time to meet registration deadlines.

To learn more about academic internships at Philadelphia University, visit [www.PhilaU.edu/career](http://www.PhilaU.edu/career) or contact Career Services.

Minimum requirements for participation:

Undergraduate:

- Full-time status
- Completion of 60 credits by the start of the internship experience (90 credits for Architecture majors)



- 2.5 cumulative GPA in the semester preceding the internship
- If a transfer student, at least 15 credits earned at PhilaU

Graduate:

- Full-time status
- Completion of 18 core graduate credits by the start of the internship experience
- 3.25 cumulative GPA in the semester preceding the internship

International:

- Meet criteria above as relevant
- Determine if eligible for Curricular Practical Training (CPT) by contacting the office for International Student Programs

Note: Students not meeting minimum requirements may be considered by submitting a formal appeal.

# College of Architecture and the Built Environment

**Executive Dean:** B. Klinkhammer

**Associate Dean:** C. Griffen

**Manager of Academic Operations:** L. Irwin

**Faculty:** S. Ageloff, L. Baumbach, D. Breiner, J. Carnell, D. Chung, K. Douglas, D. Dunham, R. Fleming, S. Frosten, R. Fryer, C. Griffen, C. Harnish, C. Hermann, K. Jacobs, D. Kratzer, K. Ku, M. Livingston, G. Lucado, A. Messinger, C. Phillips, L. Phillips, A. Plata, S. Singletary, J. Tucci

The College of Architecture and the Built Environment recognizes that design professionals require an in-depth understanding of aesthetic, technical and economic issues within a complex social, cultural and environmental framework. Building on the University's goal to provide professional skills combined with a broad general education, our mission is to prepare students to be creative, independent thinkers and innovative problem solvers. We emphasize critical excellence, balanced with the fundamental knowledge and skill required for meaningful contributions to professional design practice. In congruence with the mission of the University, we encourage students to establish a "foundation for success, lifelong learning, and active citizenship," as stewards of a sustainable society.

The College draws from the academic context, location and professional orientation of the University in pursuing its mission. Eight different career options are offered in an intimate collegiate setting and cooperative faculty/student-learning environment. The College encourages interdisciplinary and collaborative work in all the professionally-related degree programs.

The College of Architecture and the Built Environment requires the purchase of a laptop computer in the first year of each program: Bachelor of Architecture, Bachelor of Science in Construction Management, Bachelor of Science in Architectural Studies, Bachelor of Science in Interior Design and Bachelor of Landscape Architecture. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit [www.PhilaU.edu/OIT](http://www.PhilaU.edu/OIT) for hardware and software recommendations.

## COLLEGE UNDERGRADUATE DEGREE PROGRAMS

### Five-Year Bachelor of Architecture (B.Arch.)

The five-year Bachelor of Architecture (B.Arch.) program, accredited by the National Architectural Accrediting Board (NAAB), is committed to an interdisciplinary approach at all levels of the curriculum. In the first semester, it shares an integrated curriculum with Landscape Architecture, Architectural Studies and Interior Design, providing students with opportunities for collaboration and time to experience aspects of allied design disciplines. The studio, considered the core of the architecture program, is the center of activity where course material and learning are synthesized. Opportunities are provided for professional internships, study abroad, elective enrichment, specialization and independent pursuits.

### Four-Year Bachelor of Science in Architectural Studies (B.S.)

The four-year Bachelor of Science in Architectural Studies (B.S.) program allows students to focus on a field that is allied to the profession of architecture. After common first-year studios that lay the foundation for visual thinking, students select a concentration in Architectural Design Technology, Historic Preservation or Photography and New Media as they begin the second or third year depending upon their area of interest. Each concentration features collaborative studios, field work, study abroad

opportunities, professional internships and elective offerings. The Historic Preservation curriculum has been designed to meet the standards of the National Council for Preservation Education (NCPE).

#### **Four-Year Bachelor of Science in Construction Management (B.S.)**

The four-year Bachelor of Science in Construction Management (B.S.) program provides an industry-centered learning experience led by faculty who remain active in the fields they teach. Courses in construction, architecture, engineering, business and liberal arts prepare students to be ethical, innovative problem solvers who understand the full construction business model. In addition to time spent in class, students are encouraged to pursue study abroad and a variety of internship opportunities made possible by our close association with industry professionals.

#### **Four-Year Bachelor of Science in Interior Design (B.S.)**

The four-year Bachelor of Science in Interior Design (B.S.) program prepares graduates to be articulate, creative and socially-aware design professionals, and is accredited by the Council for Interior Design Accreditation (CIDA). The studio, considered the core of the interior design program, is the center of activity where course material and learning are synthesized. Opportunities are provided for interdisciplinary collaboration, study abroad, professional internships, elective enrichment, student membership in professional organizations, independent pursuits and community service.

#### **Four-Year Bachelor of Landscape Architecture (BLA)**

The Bachelor of Landscape Architecture (BLA) program meets the needs of landscape architecture students who are pursuing a first professional undergraduate degree. The program promotes sustainable urban planning and design. The Landscape Architecture Program provides a comprehensive professional education that develops the knowledge, skills, vision and leadership necessary for students to understand contemporary global issues and the varied needs of society. The program is fully accredited by the Landscape Architecture Accreditation Board (LAAB).

#### **MINORS**

The following minors are offered through the college. For more information about the minors see “Minors and Concentration” section of the Academic Catalog:

- Architectural History/Theory
- Construction Management
- Historic Preservation
- Landscape Design
- Landscape Planning
- Multimedia and Visualization Minor (offered with C-DEC)
- Photography

#### **COLLEGE GRADUATE DEGREES**

- Master of Science in Construction Management
- Master of Science in Interior Architecture
- Master of Science in Sustainable Design
  - Options
  - 2-year Part-Time Program
  - 12-Month Accelerated Full-Time Program
  - 18-Month Hybrid Online/On-Campus Program

## 2-Year Full-Time Program

### COLLEGE GRADUATE CERTIFICATES

- Graduate Certificate in Sustainable Construction Management
- Graduate Certificate in Sustainable Practices (6-month online program)

### Retention of Student Work

Projects completed by students in design studios and courses may be selected to become part of the University's collection for exhibition and/or review. Student work not selected will be stored for only 30 days into the following semester.

## C-ABE UNDERGRADUATE PROGRAMS

### ARCHITECTURE (Five-Year Bachelor of Architecture (B.Arch.))

*The checksheet can be found in the checksheets section on the catalog.*

Program Director: David Briener, PhD

#### *Mission*

The Architecture Program at Philadelphia University prepares students to engage critically in the complex discourse of architectural practice and theory. In keeping with the University's legacy of craft, materials and technology, the curriculum balances the creative and technical aspects of making architecture. Through research, analysis and exploration, students discover that design is found at the dynamic intersection of our social and physical environments. Faculty with diverse perspectives guide students in their investigations of contemporary issues that supersede trends. Encouraged by interdisciplinary study, they craft varied ideas for the environment, finding passion and delight in the consideration of architecture.

#### *Program Learning Outcomes*

At the completion of the Bachelor of Architecture program, students will demonstrate the ability to:

- Address social and cultural issues through informed design solutions
- Research, analyze, and compare design options in a global environment
- Function collaboratively to connect beyond the expertise of architects
- Organize and direct heterogeneous teams
- Demonstrate the ability to apply design history and theory, sustainable practices and technology in design projects
- Demonstrate familiarity of diverse needs, values, behavioral norms, physical abilities and social and spatial patterns of different cultures and individuals
- Exhibit the implication of this familiarity on the role and responsibilities of the architect
- Demonstrate an understanding of the sustainable practice of building
- Integrate professional practice with issues of public health, safety and welfare regulations

- Demonstrate an understanding of dealing with clients and consultants, and integrating community service
- Exhibit an awareness of structural, environmental and other building systems that support a healthy environment
- Demonstrate familiarity with current research and best practices

### *Program Description*

The Bachelor of Architecture (B.Arch.) program provides a comprehensive professional education that will develop the knowledge, skill and vision necessary for the student to understand contemporary global issues and address the varied needs of society. Fundamental to the program's philosophy is a commitment to design excellence and innovation, including the nurturing of creative individuals. A diverse faculty, traditional campus setting and dynamic urban context combine to create an ideal environment for the development of the intellectual rigor and imagination necessary to achieve the program's goals.

The faculty of the Architecture program includes individuals accomplished in research, design and professional practice. Adjunct faculty and visiting critics complement full-time faculty, bringing contemporary theory and practical experience from the region's leading architectural practices. In the professional architecture program, the design studio is the focus of activity where course work and learning are synthesized and design fundamentals are stressed.

During the first year, foundation studies courses are conducted in an interdisciplinary environment, introducing principles, values and the common vocabulary necessary for effective professional teamwork. The second-year foundation studies courses continue teaching the building blocks for future design studios. Also, during the first two years, general education courses are emphasized, and digital, technical and history of architecture and interiors courses are introduced. During the last three years of the curriculum, more advanced theoretical, technical and professional courses support studio design projects of increasing complexity and scope. In the fourth year, students are encouraged to take an interdisciplinary studio or to study abroad. The Architecture program's study-abroad option in Rome, Italy, is part of a consortium of institutions at the University of Arkansas Rome Center. Fourth-year focused research papers lead to fifth-year studio instruction emphasizing independent research, programming and critical analysis which establish the theoretical basis for design work. At this level, students' designs articulate a physically and theoretically comprehensive resolution of a thesis.

Course options at the advanced levels are designed to encourage students to develop their individual interests and professional directions. In addition to courses in other colleges and programs, opportunities for specialization and enrichment are also available in areas such as housing, experimental structures/materials, furniture design, historic preservation, design theory, photography and visualization techniques.

The Architecture program is committed to providing state-of-the-art computer technology and software to facilitate the integration of digital technologies in the design process and project development.

### *Professional Accreditation*

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture and the Doctor of Architecture. A program may be granted a 6-year, 3-year or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an

accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Philadelphia University's Architecture Program offers the following NAAB-accredited degree program:

B. Arch. (165 undergraduate credits)

Next accreditation visit: TBA

To better understand the body of knowledge and skills that constitute a professional education in architecture, visit the college website, which provides links to The 2009 NAAB Conditions for Accreditation, The NAAB Procedures for Accreditation, and other useful resources, including additional websites.

## **ARCHITECTURAL STUDIES**

*The checklist can be found in the checklists section on the catalog.*

Program Director: Suzanne Singletary

### *Mission*

Contemporary architecture encompasses a number of discrete, though intersecting, disciplines and requires individuals trained to fill a variety of roles beyond that of designer. To develop each student's specific interest, the Architectural Studies Program offers an array of concentrations, ranging from areas that are intrinsic to making and constructing buildings and environments, such as **Architectural Design Technology** to fields that support the rehabilitation and documentation of architecture and sites, such as **Historic Preservation** and **Photography and New Media**. After completing a foundation sequence of studio and technical courses, Architectural Studies students select an area of concentration as they begin the second or third year depending upon their area of interest. Through required courses, elective offerings, internship opportunities as well as study abroad options, the Architectural Studies Program encourages each student to develop proficiency in the concentration appropriate to the B.S. level. For those students seeking graduate studies, the concentration furnishes the groundwork for master's degrees in a number of fields, including Architecture, Construction Management, Sustainable Design, Historic Preservation, Urban Planning, Environmental Art and Real Estate Development.

### **Historical Preservation Concentration**

Studies in Historic Preservation allow students to acquire skills in the documentation, assessment, interpretation and restoration of historic buildings and sites. Students apply these tools in formulating intervention plans respectful of a building's salient historical features and its role as transmitter of cultural and architectural meanings. Through hands-on field work and interdisciplinary studios, coursework encompasses historic building technologies and structural systems, period styles and building types, material properties and processes of deterioration, research methodologies and diagnostic criteria as well as methods of technical and graphic documentation.

The program underscores the relationship between historic preservation and sustainable design practices. As adaptations to climate, site and available materials, historic buildings are often models of energy efficiency, conservation of natural resources and sustainable construction. The reuse, restoration and retrofitting of historic structures and the revitalization of existing neighborhoods constitute "recycling" on a grand scale and are crucial steps in combating climate change and promoting environmentally, economically and socially sustainable development. The curriculum highlights techniques and methods of historic preservation as applied to urban public spaces on multiple scales, from streets and neighborhoods, to citywide systems and metropolitan districts. Students focus upon vital preservation issues regarding spatial typologies and density to develop frameworks that order the

urban fabric into viable communities, and facilitate “place-making” through incorporation of historic structures as part of overall community development.

A recommended Study Abroad semester in Rome places preservation of both historic and modernist architecture within a global context, complementing classroom instruction and field work at historic sites and in local and National Register historic districts in the Delaware Valley and archival research at various collections in the Philadelphia region. Also recommended are professional internships that further the student’s academic experience. The Historic Preservation concentration has been designed to meet the standards for undergraduate programs set by the National Council for Preservation Education (NCPE).

Due to the broad scope of the field, graduates can pursue careers in the public, non-profit or private sectors, including building conservation and restoration, historic architecture, city and regional planning, architectural history, preservation consulting, cultural site management and heritage tourism and advocacy. This highly rigorous concentration equips graduates for entry level job opportunities and provides the basis for master’s programs in Historic Preservation, Material Conservation, Architecture, Architectural History, Urban Design, Urban Planning and Public Policy and Museum Studies.

#### *Learning Outcomes of Historical Preservation Concentration*

##### *Student will:*

- Demonstrate knowledge of history and theory of historic and modern periods, styles and places and apply knowledge to archival research of preservation.
- Demonstrate expertise and professional level competency in technical and graphic methods used to document historic structures and places.
- Apply acquired knowledge base and skill sets to analyze and assess the condition of historic buildings, systems and materials, with special emphasis upon issues of sustainability, adaptive reuse and regeneration of historic neighborhoods and places.
- Demonstrate knowledge of law, advocacy, public policy issues and the ecological impact of preservation.
- Possess knowledge and experience of the Historic Preservation practice on multiple scales (from micro to macro) and in myriad contexts from local to international.

#### Curriculum

Required courses: 53 credits

- EDVS-221 Introduction to Historical Preservation
- EDVS-266 Preservation Technology I
- ARCHDSN-208 Visualization 1: Digital Modeling
- PHOTO-436 Historic Preservation Documentation: Photography
- AHIST-206 Renaissance/Baroque (1300-1750)
- EDVS-324 Historic Preservation Documentation: Drawing
- AHIST-305 Early Modern Architecture & Interiors (1750-1930)
- EDVS-428 Restoration/Rehabilitation Interiors
- EDVS-341 American Architecture
- AHIST-306 Modern/Contemporary Architecture & Interiors
- EDVS-2xx Preservation Technology 2

- EDVS-302 Archival Research for Historic Preservation
- EDVS-3xx Architectural Forensics
- EDVS-4xx Theories of Preservation Seminar
- EDVS-4xx Cultural Site Management
- EDVS-4xx Capstone Studio 1: Macro—Preservation Planning and Urban Revitalization
- EDVS-4xx Capstone Studio 2: Micro—Restoration and Adaptive Reuse

Recommended electives: 12 credits

- UARC-3xx Historic Preservation Seminar, Rome
- UARC-3xx History and Theory of Urban Forms, Rome
- EDVS-300 Exhibition Design and Planning
- LARCH-507 Cultural and Landscape Preservation
- INTRN-493 Internship

### ***Architectural Design Technology Concentration***

Studies in Architectural Design Technology (ADT) allow students to focus on the technical and business aspects of architectural practice. Of the five phases of a building project which include schematic design, design development, construction documents, bidding and construction administration, the latter three account for approximately 80% of the entire process, while the conceptual design stage occupies only about 20%. This concentration is geared towards this 80% of architectural practice and foregrounds the later stages required to actualize a design project.

*The Architectural Design Technology concentration grooms students to enter the architecture and design fields with strong computer and building technology skills that will prove valuable to prospective employers. Students receive in-depth training in the latest software, including Building Information Modeling (BIM) and Geographic Information System (GIS), so they will be able to quickly contribute this vital expertise to a design firm. The curriculum also covers a wide range of topics, from business and sustainable practices to design and architectural history, providing a broad understanding of the process of documenting, detailing and administering a building project. In addition, through a sequence of recommended electives, each student may choose to focus on a subject of particular interest in consultation with an advisor, such as Building Technology, Construction Management, Sustainability, Visualization or Business, thereby enhancing his/her knowledge base and skill sets in a selected area.*

Graduates with a concentration in Architectural Design Technology are prepared for various employment opportunities within design firms, including project administrator, design/build manager, design firm business manager, specification writer, BIM manager, design firm LEED coordinator or office CAD manager. Since this is a pre-professional degree, the concentration will also provide a solid springboard for entry into a graduate program of study. These may include Architecture, Construction Management, Sustainable Design, Interior Architecture, GeoDesign or Historic Preservation.

### ***Learning Outcomes of Architectural Design Technology Concentration***

*Student will:*

- Illustrate expertise and professional level competency in current digital CAD and GIS software used to research and document building designs.



- Demonstrate acquired knowledge base and skill sets to the selection and analysis of structural dynamics, construction methods, environmental control systems, sustainable technologies and the properties of materials.
- Acquire knowledge of the legal, financial, marketing and management issues relevant to administering a design-based practice.
- Apply basic principles of architectural drawing and design to projects of differing scales and typologies.
- Demonstrate knowledge of history and theory of historic and modern periods, styles and places in the built environment.

## Curriculum

The first two years of the program are exactly the same as the five-year Bachelor of Architecture program. This will facilitate easy transfers between the BArch and the ADT concentration.

Concentration Courses taken during the first and second years:

Required core courses: (37 credits)

ADFND-101	Design 1
ADFND-102	Design 2
DRAW-101	Drawing 1
DRAWING 2	Visualization Elective
ARCH-201	Design 3
ARCH-202	Design 4
ARCHDSN-210	Tech 1: Materials and Methods
ARCH-212	Tech 2
AHIST-206	History 2; Renaissance/Baroque
ARCH-303	Structures

Concentration Courses taken during the third and fourth years:

Required core courses: (33 credits)

ARCH 304	Structures 2
ARCH 313	Tech 3 Dynamic Systems
ARCH 314	Tech 4
AHIST-305	History 3: Early Modern (1750-1930)
AHIST-306	History 4: Modern/Contemporary
ARCH 416	Tech 5 (BIM)
LARCH 310	GIS for Landscape Architecture
ACCT 101	Financial Accounting
BLAW 301	Business Law
LARCH 515	Advanced GIS

ARCH 503 Professional Management

Recommended electives: (12 credits)

SUST 204 Sustainable Planning & Land Use  
SUST 300 Sustainable Technologies for Architecture  
ARCH 413 Experimental Structures  
ARCH 414 Experimental Materials  
ARCH 426 Design/Build  
MKTG 102 Principles of Marketing  
MGMT-301 Principles of Management  
MGMT-310 Organizational Behavior  
FINC 301 Financial Management  
ECON 205 Macroeconomics  
ECON 206 Microeconomics  
CMGT 102 Intro Construction Industry  
CMGT 104 Intro to Construction Management

### **Photography and New Media Concentration**

Studies in Photography provide a foundation in photographic techniques, processes, history and theory. The curriculum stresses the role of the medium as a value and an idea that has impacted societal trends and shaped modern visual culture. As both practicing photographers and consumers of images, students gain the knowledge to think critically about photographs and visuality in a range of contexts, including art, advertising, fashion, journalism, documentation and propaganda, and to explore the social, political and ethical dimensions of visual media as part of mass culture. Students apply the ability to “read” photographic images critically, and within a range of contexts, to distinguish the differences between, and motivating factors behind, the various uses to which photography has been used, prioritizing specific social, cultural, economic and political concerns.

The program focuses upon photography as a tool for documentation, research and preservation as well as a medium for self-expression. Laboratory-based coursework provides students with the skills to produce high-quality photographs, using both traditional and digital processes, to apply a documentary methodology to thematic explorations of subject matter, to research and document architecture through photographs that meet the standards of the Historic American Buildings Survey (HABS) and to correlate photographic framing and narrative with sequential movement and wayfinding in the design of exhibition spaces. Courses explore interdisciplinary relationships between photography and architecture, design, fashion, preservation, science and the humanities. Academic training is complemented by recommended Study Abroad in Rome and professional internships.

In addition, eighteen credits of “free electives” enable knowledge and skills acquired within this core photography curriculum to form the basis for exploration of cognate disciplines that can further a student’s career choices upon graduation. Working in consultation with an advisor, each student may select a sequence of recommended electives that shape an area of specific emphasis in response to current trends within the field, such as “Environmental Art and Gaming” or “Exhibition Design and Interactive Media.” Each option uses photographic and/or computer-based processes to design an environment, either actual or virtual. This intensive course of study prepares graduates for careers in architectural photography, historic preservation, fashion photography, digital-imaging, gallery/museum

exhibition design and documentation, photographic archives, commercial photo illustration, magazine photo editing, photojournalism, medical/forensic and freelance. This concentration can provide the basis for pursuing graduate studies in Photography, Historic Preservation, Museum Studies, Design, Imaging Science and Photographic Conservation.

### *Learning Outcomes of Photography concentration*

Students will:

- Demonstrate knowledge of photographic history, theory and criticism.
- Articulate the role photography has played in 19th and 20th century visual culture as well as aesthetic, technical and cultural issues in contemporary photography.
- Demonstrate technical proficiency in camera manipulation, darkroom skills and studio methods for the production of photographic imagery in the following formats: film, digital and 4x5 view camera.
- Apply a documentary methodology to thematic explorations of a variety of motifs and subjects, including architecture and landscape, current events, fashion, still-life, portraiture, etc.
- Acquire knowledge of the professional practice of photography, including career opportunities, business aspects, professional ethics, photographic law, intellectual property in the age of digital duplication and personal objectives.

### Curriculum

Required Courses: 39 credits

PHOTO-101	Introduction to Photography: Black and White
PHOTO-102	Introduction to Photography: Digital
PHOTO-201	Studio Photography
PHOTO-302	Architectural Photography
PHOTO-303	Introduction to the View Camera: A Survey of Historical and Contemporary Techniques
PHOTO-307	History of Photography
PHOTO-3xx	Issues in Contemporary Photography
PHOTO-436	Historic Preservation Documentation: Photography (HABS)
PHOTO-4xx	Theories of Photography Seminar
PHOTO-4xx	Photography Capstone
PHOTO-4xx	Documentary Photography
PHOTO-4xx	Professional Practice: Photography
ARCST-300	Exhibition Design and Planning

Recommended electives: (18 credits)

Students can shape an area of specialization, such as Environmental Art and Gaming, Exhibition Design and Interactive Media, Architectural Photography and New Media Communications.

## **CONSTRUCTION MANAGEMENT**

Program Director: Greg Lucado

### *Mission*

The Bachelor of Science in Construction Management Program mission is to prepare students to be ethical, innovative problem solvers who understand the full construction business model.

### *Program Learning Outcomes*

In keeping with that mission and the educational goals of Philadelphia University, graduates from the Bachelor of Science in Construction Management program will demonstrate the ability to:

- Find and evaluate relevant cost, schedule, quality and safety data and reach and defend conclusions based on sound analysis.
- Communicate effectively with a variety of audiences such as owners, design professionals and code officials using appropriate media.
- Create sound, innovative approaches to challenges faced by construction project teams.
- Identify and evaluate the ethical choices faced by construction management professionals and formulate value-based responses.
- Collaborate across disciplines of construction project stakeholders and appreciate the benefit of that collaboration.

### *Program Description*

Construction managers play an integral role in the development, construction and maintenance of commercial, residential, institutional and industrial buildings, as well as civil and transportation infrastructure. Degree programs in construction management have become the preferred higher-education option for students interested in leadership positions within this multi-faceted and competitive field.

This four-year professional curriculum has been developed based upon the guidelines of the American Council for Construction Education (ACCE) and is pursuing ACCE accreditation according to that institution's established timeframe. The curriculum combines traditional business management and construction-specific coursework with a comprehensive liberal arts and sciences program of studies to acquaint students with the full business model of construction management.

The program strives to produce graduates familiar with industry-specific management practices who have developed an ethical, global and sustainable problem solving approach. Thus, our graduates will be prepared to meet the challenges of a variety of career options which include: Construction Project Management, Construction Field Management, Construction Project Estimating, Scheduling, Project Supply Chain Management, Real Estate Management, Construction Company Marketing, Specialty Contract Services Management, Capital Projects Management, Installation Management, Facilities Management and Construction Material and Equipment Sales.

Construction management courses explore the basic disciplines of cost, time, quality and safety. Upper level courses offer students the opportunity to collaborate and innovate across these disciplines incorporating the business management skills as well as the liberal arts core to explore innovative approaches to hands-on project management challenges.

The teaching faculty brings a wide variety of rich industry experience to the Program. Many are current practitioners, bringing their daily professional challenges to the classroom, enriching the student experience.

The proximity to Philadelphia's active urban economy presents opportunity for a wide variety of jobsite experiences and exposure to innovative, state-of-the-art practices.

Housed in the University's highly-regarded College of Architecture and the Built Environment, students learn collaboratively with students in the Architecture, Interior Design, Architectural Studies and Landscape Architecture programs.

Students are encouraged to participate in optional study abroad programs and internships.

## **INTERIOR DESIGN**

*The checksheet can be found in the checksheets section on the catalog.*

Program Director: Lauren Baumbach

### *Mission*

Building on the university's mission to "prepare graduates for successful careers in an evolving global marketplace..." the Interior Design Program's mission is to prepare students to be independent thinkers, innovative problem solvers, collaborators and leaders with high standards of professionalism, integrity and excellence in design. With an emphasis on creativity, balanced with the knowledge and skills required for meaningful contributions to professional design practice, we instill in students an awareness and understanding of the global, cultural, social, aesthetic, technological, environmental and ethical responsibilities involved in the design of interior environments.

The Program is grounded in the belief that the interior designer mediates between human experience and the built environment and should enter the global marketplace as articulate, creative, inspired and socially-aware design professionals.

### *Program Learning Outcomes*

Students will:

- Examine global issues and the implications of a diverse cultural and socioeconomic society and the impact of these on the design of the built environment.
- Assess the diverse values, behavioral norms, physical abilities, psychological and spatial needs of different demographic/user groups in the context of designing interior environments.
- Design interior spaces using sustainable practices as they relate to environmental and ecological issues.
- Research and problem solve in order to generate innovative and creative solutions in the design of interior environments.
- Apply historical and theoretical knowledge of interiors, architecture, art and the decorative arts to the design and analysis of interior environments.
- Engage in working collaboratively and in multi-disciplinary teams.
- Comply with ethical and professional standards of practice and the laws, codes, standards and guidelines that impact the health, safety and welfare of building occupants.
- Select and apply colors, furniture, fixtures, equipment, finish materials and lighting in the design of interior spaces.
- Demonstrate knowledge of interior construction and building systems.

### *Program Description*

The Interior Design Program is a four-year undergraduate degree program that leads to a Bachelor of Science in Interior Design. The Interior Design Program provides an extensive education to meet the demands and challenges of this exciting and creative profession. In preparation for a rapidly evolving, technology and information-driven society, Interior Design requires an in-depth understanding of the aesthetic, cultural, technical, environmental, global and economic issues pertaining to the built environment.

The program strives to instill in our graduates the highest standards of professionalism and professional practice, integrity, competence and excellence in design. A multidisciplinary faculty, a close-knit campus community and prime location in Philadelphia provide a stimulating setting for the informed and inventive academic development of every student.

The emphasis of the program is to provide a holistic and comprehensive education in interior design with a balance between the theoretical, conceptual, creative and technical aspects of the discipline. This education is delivered through the core interior design curriculum, which is informed and enriched by the liberal arts and science curriculum and free electives.

At the program's core are design studios in which students explore the creative process through a series of varied and progressively more complex projects, covering the range of practice from residential to commercial and institutional design. The functional knowledge necessary for design is introduced through formally-structured courses focusing on such varied topics as space planning, ergonomics, universal design, sustainable design, computer visualization, detailing, design, color theory, furniture design, materials and textiles. Students also study the history of architectural interiors from pre-history to contemporary works and understand and analyze their cultural relevance. The interior design studios foster an interdisciplinary environment, centered on creative experimentation, where material from other courses is synthesized through the act of design. Each year, the student will build upon earlier courses and begin to integrate functional and cultural issues into the design studio. In the fourth year, the Capstone Experience is the culmination of all previous studies, integrating design research, programming, history, theory, human behavior, technology, innovative design solutions, construction detailing, furniture and materials – all important aspects of creating meaningful interior environments.

Students may follow secondary specializations such as business, construction management, textiles, photography or furniture design. The Interior Design Program also offers valuable opportunities for internships in design firms, memberships in professional organizations, a junior semester studying abroad in the cities of Copenhagen, Milan or London and discipline-based community service. The program is grounded in the belief that interior designers should enter the global marketplace as articulate, creative, inspired designers and socially-aware professionals. The program seeks to instill in students an awareness and sensitivity to the social, technological, aesthetic, cultural and ethical responsibilities involved in the design of living and working environments.

### *Accreditation*

The Council for Interior Design Accreditation (CIDA), the national organization solely responsible for accrediting such programs, accredits this professional program. This first-professional degree, combined with interior design work experience, qualifies our graduates to sit for the National Council for Interior Design Qualification (NCIDQ) Exam after graduation. Passing this exam leads to NCIDQ professional licensure or certification, which is required in some states in the US and the Canadian provinces. As the principal steward of the creation of space and place, the Interior Designer is responsible for the safety, shelter, support and enrichment of human occupancy, a duty which can be fulfilled through the resolution of the form of space and design details in the built environment.

## LANDSCAPE ARCHITECTURE

*The checklist can be found in the checklists section on the catalog.*

Program Director: Claudia Goetz Phillips, FCELA, PhD

### *Mission*

The four-year Bachelor of Landscape Architecture (BLA) program meets the needs of landscape architecture students who are pursuing a first professional undergraduate degree. The program promotes sustainable urban planning and design. The Landscape Architecture Program provides a comprehensive professional education that develops the knowledge, skills, vision and leadership necessary for students to understand contemporary global issues and the varied needs of society. The program is fully accredited by the Landscape Architecture Accreditation Board (LAAB).

### *Program Learning Outcomes*

At the end of four years, our graduates will be able to:

- Successfully integrate ecological principles into the design process.
- Incorporate cultural, social and economic issues into the design process in order to come up with a responsive and responsible design solution.
- Exhibit a high level of professionalism and ethics.
- Work within groups of varied disciplines and organizational types, social/cultural and economic backgrounds.
- Demonstrate leadership, team building and organizational skills for various types of groups.
- Exhibit knowledge of Landscape Architecture history and theory.
- Demonstrate how sustainable design principles and past and current theory inform the design process.

### *Program Description*

The Landscape Architecture Program supports local and regional leadership in confronting ecological issues of the natural and built environments within the Philadelphia Metropolitan corridor (New York City to Washington, DC). The focus is on urban ecological issues while searching for environmentally-sustainable solutions to human problems of growth and development. The program is committed to providing leadership in confronting issues that affect urban neighborhoods, particularly those that are in need of revitalization.

Philadelphia University is uniquely positioned on the edge of the Wissahickon Valley Park, a 1700-acre park within the Fairmount Park System, where natural systems and restoration techniques can be easily studied. The area has a vast concentration of cultural, social, historic and natural systems that present a vast resource to the students.

Throughout the education process, students are challenged to develop a thorough understanding of a site, including its sociocultural and environmental factors. At the core of the program are service-learning based planning and design studios where students focus on the development of sustainable responses and solutions to site problems and opportunities. The goal is to challenge students to create site-appropriate designs, as well as to enhance the value and sustainability of places.

During the first year, there are two foundation design studios—one with other C-ABE students and the second for landscape architecture majors. Here students are introduced to principles, values and the common vocabulary necessary for effective professional work. The second-year courses continue

teaching the building blocks of design for future design studios; design studio topics are site design and urban design I. Also, during the first two years, liberal arts courses are emphasized and digital, technical and history of landscape architecture courses are introduced.

During the third year, more advanced technical and professional courses are added to the curriculum, supporting design studio projects of increasing complexity and scope. The design studios focus on community design and restoration management. These studios are supported by courses in human behavior, plant community ecology and urban hydrology.

In the fourth year, first semester, an interdisciplinary design studio focuses on larger-scale urban design issues, e.g., waterfront development, industrial site redevelopment or neighborhood design. In the construction documents course, students develop a full set of construction documents based on a previous design. During the final semester each student completes an independent design project of their choosing that articulates the physical, spiritual and theoretical objectives of the project and demonstrate full resolution of sustainable landscape architectural design.

In support of the goals for professional education, the Landscape Architecture Program is committed to providing state-of-the-art computer technology and software to facilitate the integration of digital technologies in design process and project development. For example, GIS software is introduced in the second year and is incorporated in all upper level design studios.

#### *Accreditation*

The Landscape Architecture Program is fully accredited by the Landscape Architecture Accreditation Board (LAAB).



## C-ABE GRADUATE PROGRAMS & CERTIFICATES

### MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT

Program Director: Greg Lucado

#### *Mission*

The Master of Science Degree in Construction Management is designed to provide students with the knowledge and skills to plan and manage each phase of the construction process as applied to complex commercial, infrastructure and residential building projects. The mission of the program is to offer a comprehensive construction and management education consistent with the mission of the University and the College of Architecture and the Built Environment to improve the quality and sustainability of the construction industry and thus the built environment.

#### *Program Learning Outcomes*

Graduates of the M.S. in Construction Management will:

- Demonstrate expertise and organizational skills in the planning, scheduling and management of all phases of the construction process from project assessment and feasibility to project close-out and hand over.
- Demonstrate business management skills in finance, accounting, cost estimating and cost control in the preparation of bid documents, contracts, proposals, and specifications and articulate knowledge of the legal requirements in the construction industry, including the breadth of legal contract documents, insurance and liability.
- Work collaboratively with professionals from various disciplines, including architects, developers, and sub-contractors, as well as with clients and special-interest groups.

#### *Program Description*

The Master of Science Degree in Construction Management will provide students with the knowledge and skills to plan and oversee each phase of the construction process as applied to complex commercial, infrastructure and residential building projects. Areas of study will include: project planning, scheduling risk management, construction information modeling techniques and documentation, legal and contractual issues, project finance and cost control and health and safety. Moreover, a key component of the program will be the integration of techniques, materials and methods of sustainable building into the construction process. Future construction managers will be trained in the principles of sustainability and Leadership in Energy and Ecological Design (LEED) standards. By definition, construction management is a cross-disciplinary practice that synthesizes aspects from the fields of business, architecture, engineering and construction. This degree program will provide a balance among various skill sets with emphasis upon practical application, thereby ensuring that a graduate has the necessary knowledge base to be simultaneously successful on a construction site and in an office setting.

#### *Curriculum Design*

The program is designed as a 37-credit, 12-course curriculum that can be completed in one to two years depending on the course load and sequencing taken by the student. The courses will be offered in two 15-week semesters per year, as well some offerings in the 12-week summer semester. In addition to coursework, a student will be required to complete a minimum of 400 hours work experience in a construction firm under the supervision of an academic and a professional advisor.

### *Conditional Requirements*

Before matriculation in the fall semester, a student must have acquired specific skill sets and introductory-level knowledge bases. The Program Director will review each applicant's academic and work history to determine readiness for graduate-level study. Students who are judged deficient in certain content areas will be admitted conditionally, upon completion of designated prerequisite coursework. Prerequisite courses can be completed by taking classes on-campus or, if available, online during the summer before entering the program.

### FULL-TIME PROGRAM

#### *Fall Semester*

MCM 600	Construction Estimating and Scheduling	3
MCM 602	Construction Information Modeling	3
SDN 601	Sustainable Design Methodologies	3
MBA 625	Management Communications and Negotiations	3

#### *Spring Semester*

MCM 603	Construction Law: Roles and Responsibilities	3
MCM 604	Project Finance and Cost Control	3
MCM 606	Construction Risk Management	3
SDN 603	Sustainable Systems	3
	Elective	3

#### *Summer Semester*

MCM 612	Advanced Construction Project Management	3
MCM 901	Master's Project	3
MCM-791	Construction Management Internship	1

Total Credit Hours: 37 Credits

### **Certificate in Sustainable Construction Management**

The Construction Management program in the College of Architecture and the Built Environment offers to those with at least two years of professional experience in the construction management field the opportunity to further develop their knowledge of current trends in the industry. Our 12-credit hour certificate program recognizes the major changes happening in the architecture and construction industry in the fields of sustainable buildings, integrated practice and building information modeling. Therefore the program offers three courses that specifically address these areas while offering flexibility by a fourth elective course of the student's choice. Acceptance to the certificate program assumes the applicant already possesses a level of competency in the construction management field gained through professional experience.

MCM 602	Construction Information Modeling	3
SDN 601	Sustainable Design Methodologies	3
SDN 603	Sustainable Systems	3
Elective:	Any other required or elective course in the curriculum	3

TOTAL CREDIT HOURS: 12 CREDITS

## **MASTER OF SCIENCE IN INTERIOR ARCHITECTURE**

Program Director: Scott M. Ageloff, FIDEC ASID AIA

### *Mission*

The M.S. in Interior Architecture program meets the needs of students who hold a non-design undergraduate degree and seek to obtain a comprehensive professional-level education. It also offers up to one year of advanced standing for those already in the field who are interested in refining their knowledge and skills at the graduate level. So whether seeking an introduction, or wanting to build on previous academic and/or work experience, this program prepares students to reach their full potential and to join both large and small firms specializing in many areas of practice including corporate, residential, health care, hospitality, retail and educational facilities.

### *Program Description*

The M.S. in Interior Architecture program provides a balance between theory and application, and immerses students in the use of current technologies and sustainable practices. The curriculum ensures that students will be fully prepared to join the profession immediately upon graduation, and assume roles in design, production, management or principal positions during their careers. In addition, it incorporates an international perspective and prepares graduates to do projects across international boundaries and to work anywhere in the world. After completing an apprenticeship in the field, they will be fully prepared to sit for and pass the National Council for Interior Design Qualification (NCIDQ) certification exam, which is recommended throughout the U.S. and Canada.

Areas of study include: foundation two-dimensional and three-dimensional design, advanced spatial/interior design, analogue and digital representation techniques, programming, sustainable design, building structures, construction methods and technologies, building systems and lighting, color theory, design detailing, materials, finishes, codes, barrier free design, universal design, professional practice and ethics. The required internship for credit provides students with practical work experience in an architecture or interior design firm under the supervision of an academic advisor and a professional mentor. The name Interior Architecture is a further reflection of the program's underlying educational philosophy and pedagogy, emphasizing the design of the entire interior environment encompassing all parts of the interior volume, and acknowledging the continuum between architecture and interiors. This is a pedagogical strength of this program and presents a considerable advantage to students.

A focus of the program is its holistic approach to the design of interior environments along with a complete knowledge of the interior building technologies and construction. Additionally, the teaching of sustainable and ecological design is integrated throughout the curriculum. The demand for interior design practitioners who possess a thorough understanding of ecological/sustainable design and who go on to acquire Leadership in Energy and Environmental Design (LEED) certification is high.

### *Curriculum Scope and Sequence*

The program is designed as a 49-69 credit, 15-21 course curriculum that can be completed in two to three years depending on a student's background and pending course requirements. Students with undergraduate degrees from allied fields may be able to complete the program in two years (49 credits/15 courses). Those with undergraduate degrees in unrelated fields, such as liberal arts and sciences, may need the full three-year 69-credit /21-course sequence. All courses, except the abroad

semester, will be offered in two, 15-week semesters per year. The exception is a 7-week abroad semester, which is in the summer after Year 2.

The audiences for this degree program are two distinct groups: 1) graduates from undergraduate programs in interior design or architecture, and allied fields such as landscape architecture, industrial design, architectural engineering, visual arts and other design related fields; and 2) graduates from undergraduate programs in unrelated fields such as liberal arts, business and the sciences who are seeking a career change. The program is designed as a 3-2 program with 69 credits required over three years for students with unrelated bachelor's degrees and 49-69 credits for those with related bachelor's degrees.

Before matriculation, the Program Director reviews each applicant's academic and work history to determine specific placement in the program. The student may then be admitted into the program for the full three-year sequence, or be required to take only select courses from the Year 1 curriculum, or be permitted to enter starting at Year 2.

### *Course Sequence Chart*

#### YEAR 1

##### Fall Semester

(Required for those with unrelated undergraduate degrees)

IARCP501	Design I for I.A.	4 credits
IARCP503	Graphic Representation	3 credits
IARCP505	History of Design I for I.A.	3 credits

##### Spring Semester

(Required for those with unrelated undergraduate degrees)

IARCP502	Design II for I.A.	4 credits
IARCP504	Visual Communication I	3 credits
IARCP508	Presentation Techniques	3 credits

#### YEAR 2

##### Fall Semester

(Required for those with unrelated undergraduate degrees)

IARC601	Design III for I.A.	4 credits
IARC603	History of Design II for I.A.	3 credits
IARC607	Technology I for I.A.	3 credits
IARC610	Textiles and Materials	3 credits

##### Spring Semester

(Required)

IARC604	Visual Communication II for I.A.	3 credit
IARC606	Design IV for I.A.	4 credits
IARC608	Technology II for I.A.	3 credits

##### Summer

(Required) 7 Weeks Abroad

IARC701	Design V for I.A.	3 credit
IARC-703	History of Design III for I.A.	2 credits

### YEAR 3

#### *Fall Semester*

(Required)

IARC702	Design VI for I.A.	4 credits
IARC707	Technology III for I.A.	3 credits
IARC708	Professional Practice and Ethics	3 credits
IARC709	Research and Programming	2 credits

#### *Spring Semester*

(Required)

IARC710	Thesis for I.A.	5 credits
IARC791	Internship for I.A.	1 credits
Elective		3 credits

YEAR 2 + YEAR 3 SUBTOTAL: 49 CREDITS

TOTAL CREDITS REQUIRED FOR GRADUATION: 49-69 CREDITS

### **MASTER OF SCIENCE IN SUSTAINABLE DESIGN**

Program Director: Rob Fleming, AIA, MARCH, LEED AP BD&C

[www.PhilaU.edu/green](http://www.PhilaU.edu/green)

#### *Mission*

Building on the University's mission to provide professional skills combined with a broad general education, the Sustainable Design program seeks to prepare students for the built environment industry by teaching specific skill sets necessary to conceptualize, measure and construct a sustainable environment. This is balanced by broader, theoretical avenues of study that emphasize systems thinking, which place the technical knowledge gained in the program into context. The program culminates with a two semester Thesis Project that is meant to provide a component of depth in a specific built environment discipline or a particular subset of sustainability.

The MS in Sustainable Design is a post baccalaureate master's degree program that serves students from a wide array of disciplines that range from architecture to engineering to design to construction. The faculty members of the program are drawn from similar disciplines to underscore the transdisciplinary nature of the program. The emphasis of the program is on the sustainable built environment with students exploring different avenues of study including design, entrepreneurship and policy development. This approach is supported by a curriculum that comprises four "platform" courses, followed by a collaborative studio, and culminating in the Thesis Project. Electives are used to provide opportunities to explore related topics involving sustainability, or for a short study abroad experience. The total credit requirement for the degree is 33-36 credits and features multiple pathways for completion including part-time, full-time and online study. The program features a unique set of faculty that reflects a balance between those actively pursuing the practice of sustainable design and those who are exploring the more theoretical aspects of the discourse.

#### *Program Learning Outcomes*

Graduates of the MS in Sustainable Design will:

- Apply the core skill sets necessary to accomplish an effective sustainable design project as a response to environmental, social and economic forces.

- Provide leadership, team building and organizational skills for diverse groups through the integrated process.
- Work effectively within groups of varied disciplines.
- Synthesize theories of sustainability into comprehensive research and design projects.
- Develop diversity initiatives that are integral to the sustainability problem solving process as a reflection of an emerging global marketplace.
- Apply ethical values to the integrated design process and to the selection of systems and materials for a built project.
- Embrace the realities of prevalent societal structures of society as a base to build a new enterprises focused on the optimization of environment, equity and economic goals.

### *Curriculum Design*

The Curriculum of the MSSD Program features three teaching/learning strategies:

**Lectures** build an overall knowledge base about sustainability, while providing detailed information on materials, construction systems, life-cycle analysis and green-building documentation metrics such as the Leadership in Energy and Environmental Design (LEED) rating system.

**Labs** will develop an “informed intuition” about the relationship between the natural and built environments as a means to think and design in standard design and construction projects.

**Studios** will synthesize the knowledge base and informed intuition into larger, more complex projects that draw upon creativity, ingenuity and innovation as key approaches to problem solving and design conceptualization. Studio-based learning incorporates one-on-one communication with faculty, group projects with other students from diverse disciplines and a student driven final Thesis Project that allows each student to conduct a specialized research or design project.

### *Foundation Course Requirements*

Foundation course requirements will vary according to the applicant’s completed undergraduate major, as well as their professional experience. The Foundation courses are geared towards students without a background in the built environment professions. Credits earned in the Foundation courses do not count towards the requirements for graduation. Applicants will be advised on an individual basis by the graduate program director concerning prerequisites and the required foundation courses.

### *Degree Options*

The MSSD Program offers students four ways to complete their degree: a 2-year part-time program; a 12-month accelerated full-time program; an 18-month hybrid program; and a 2-year full-time research-oriented program.

#### **2-Year Part-Time Option**

This part-time program is ideal for the working professional who is seeking to gain specific expertise in sustainable design and who wants to add credentials in this rapidly growing field. This program typically entails two nights per week of classes totaling 6 credits. Classes begin in late afternoon or evening with 3:30 PM as the earliest start time. It is recommended that students inform their employers of their academic schedule in order to maintain a balance between the demands of course work and office responsibilities. Students may elect to take one course per semester.

### **12-Month Accelerated Full-Time Program**

This accelerated full-time degree program allows students to focus on green building design in an intensive educational experience. Due to the course sequencing requirements to achieve this degree in 12 months, only those with degrees and some experience in the design of the built environment will be admitted to this program. This program is not for those students wishing to work while attending school.

### **18-Month Hybrid Program**

This hybrid on-campus/online program is ideal for students wanting to shorten their time away from home by completing 6 - 12 credits online prior to coming to campus. This program also relieves some of the pressure that is associated with the 12-month accelerated program because some of the credits will be already completed prior to coming to campus. The program starts online in the spring semester and summer semesters followed by 12 months on-campus.

### **2-Year Full Time Program**

This full-time program allows students to spend the time needed to delve deeply into the more detailed aspects of sustainable design, engineering and architecture. Students in this track will be encouraged to plug into ongoing research projects as well as other grant-funded projects at the University. This track is most suitable to those students who are accepted as graduate research assistants or for international students seeking educational opportunities in this country.

### **2-Year Part-Time Program**

(33 graduate credits)

#### YEAR I

##### *Fall Semester*

SDN 601	Sustainable Design Methodologies	3
SDN 603	Sustainable Systems	3

##### *Spring Semester*

SDN 602	Adaptive Design	3
SDN 604	Green Materials	3

##### *Summer Semester*

SDN ____	Elective	3
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#### YEAR II

##### *Fall Semester*

SDN 611	Sustainable Design Studio	6
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##### *Spring Semester*

SDN 900	Thesis in Sustainable Design I	3
SDN ____	Elective	3

##### *Summer Semester*

SDN 901	Thesis in Sustainable Design II	6
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TOTAL CREDIT HOURS: 33 Credits

### **12-Month Accelerated Full-Time Program**

(33 graduate credits)

YEAR I

*Fall Semester*

SDN 601	Sustainable Design Methodologies	3
SDN 602	Adaptive Design	3
SDN 603	Sustainable Systems	3
SDN 604	Green Materials	3

*Spring Semester*

SDN 611	Sustainable Design Studio	6
SDN ___	Elective	3
SDN 900	Thesis in Sustainable Design I	3

*Summer Semester*

SDN__	Elective	3
SDN 901	Thesis in Sustainable Design II	6

TOTAL CREDIT HOURS: 33 Credits

**18-Month Hybrid Program**

(33 graduate credits)

YEAR I

*Spring Semester*

SDN 601	Sustainable Design Methodologies	3
SDN 604	Green Materials	3

*Summer Semester*

SDN 603	Sustainable Systems	3
SDN 6__	Elective	3

YEAR II

*Fall Semester*

SDN 602	Adaptive Design	3
SDN 611	Sustainable Design Studio	6

*Spring Semester*

SDN 900	Thesis in Sustainable Design I	3
SDN ___	Elective	3

*Summer Semester*

SDN 901	Thesis in Sustainable Design II	6
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TOTAL CREDIT HOURS: 33 Credits

**2-Year Full-Time Program**

(36 graduate credits)

YEAR I

*Fall Semester*

SDN 601	Sustainable Design Methodologies	3
SDN 602	Adaptive Design	3
SDN 603	Sustainable Systems	3

*Spring Semester*



SDN__	Elective	3
SDN 611	Sustainable Design Studio	6
YEAR II		
<i>Fall Semester</i>		
SDN 900	Thesis in Sustainable Design I	3
SDN 604	Green Materials	3
SDN__	Elective	3
<i>Spring Semester</i>		
SDN 901	Thesis in Sustainable Design II	6
SDN__	Elective	3
TOTAL CREDIT HOURS: 36 Credits		

### **Graduate Certificate in Sustainable Practices**

(36 graduate credits)

The online Graduate Certificate in Sustainable Practices Program is geared towards working professionals seeking to build their knowledge base and credentials in the field of sustainable design, engineering and construction of the built environment. The program offers a wide array of critical skills including the LEED® rating system, building information modeling, the basics of energy modeling and life cycle assessment. Credits earned in the Certificate program are transferable into the MS in Sustainable Design program. Students must apply for, and be accepted into, the MS Program. For additional information, please refer to the University website.

YEAR I

*Spring Semester*

SDN 601	Sustainable Design Methodologies	3
SDN 604	Green Materials	3
<i>Summer Semester</i>		
SDN 603	Sustainable Systems	3
SDN__	Elective	3
TOTAL CREDIT HOURS: 12 Credits		

## Kanbar College of Design, Engineering and Commerce

**Executive Dean:** R. Kander

**Academic Dean, School of Business Administration:** S. Lehrman

**Academic Dean, School of Design and Engineering:** M. Leonard

**Associate Dean:** P. Russel

**Associate Dean of Graduate Studies:** J. Klett

**Manager of Academic Operations:** M. Sunderland

**Faculty:** F. Baseman, G. Beatty, C. Beevers, S. Borowsky, J. Brady, D. Brookstein, S. Christoffersen, G. Cooper, T. Corlett, J. Crook, A. Datta, M-E. Faust, S. Finch, G. Frampton, C. Frank, B. George, M. Govindaraj, M. A. Hand, M. Havens, E.J. Herczyk, N. Howard, M. Kradel-Weitzel, M. Leonard, H. Lermack, J. Likens, C.M. Lim, D.K. Malhotra, E. Mariotz, R. Masoodi, J. Naidu, V. Nandikolla, N. Nixon, C. Pastore, R. Poteau, M. Roberts, C. Rusinko, P. Russel, L. Russow, L. Samoni, J. Sanford, J. Solano, L. Sztandera, F. Tovia, H. Ujjiie, G. Unger, M. Weiss, N. Wyatt

Philadelphia University's Kanbar College of Design, Engineering and Commerce (C-DEC) provides a multi-dimensional understanding of design, engineering and business by bringing together these rapidly evolving fields in an innovative, integrated educational experience that prepares students to think critically about the world.

The schools of Business Administration and Design and Engineering comprise the Kanbar College of Design, Engineering, and Commerce and its programs provide students with strong disciplinary skills, a balanced grounding in the liberal arts and an understanding of the relationship of their fields to each other and the spectrum of professional careers and opportunities. Faculty from each discipline collaborate to promote in students a heightened self-awareness, the ability to work in multi-disciplinary teams and to use methods for innovating in order to secure the job opportunities of today and to adapt to the emerging fields of tomorrow. The goals of the Kanbar College are to create a dynamic educational platform for students:

- to become professionals who can adapt to the changing work place
- to navigate complexity and understand its underlying frameworks
- to integrate knowledge domains
- to work effectively in teams and value diverse perspectives
- to find new ways of adding value to the world

The Kanbar College offers academic programs in the following degrees, majors and minors:

### **SCHOOL OF BUSINESS ADMINISTRATION**

#### **Bachelor of Science degrees in these business majors:**

- Business with the following concentration options –
  - Accounting
  - Finance
  - International Business
  - Management: Leadership and Innovation in Organizations
  - Marketing: Consumer Insight and Innovation
- Fashion Merchandising and Management with the following concentration options –
  - Fashion Merchandising
  - Fashion Industry Management

## **Minors**

The following minors are offered in the School of Business Administration.

For more information about the minors see “Minors and Concentration” section of the Academic Catalog:

- Accounting
- Business (for non-business major)
- E-Commerce
- Economics
- Fashion Industry Management
- Finance
- Human Resource Management
- International Business
- Management
- Marketing
- Organizational Behavior
- Pre-M.B.A.

## **Graduate Degrees**

- Master of Business Administration – Evening Program  
With options in:  
Accounting/Certified Public Accountant (C.P.A.) track  
Business Administration  
Finance  
International Business  
Marketing  
Taxation/Certified Public Accountant (C.P.A.) track
- Master of Business Administration – One-Year Day Program
- M.S. Fashion Apparel Studies
- M.S. Taxation

## **Combined degrees are offered in the following areas:**

- B.S. Business/M.B.A.

## *Non-degree graduate business offerings*

Pre-Master’s Coursework

Pre-M.B.A. Foundations

Post-Master’s Coursework

- Accounting
- Finance
- International Business
- Marketing
- Taxation

## **SCHOOL OF DESIGN & ENGINEERING**

### **Bachelor of Science in Engineering degrees in these engineering majors:**

- Engineering (with minor tracks in Architectural, Industrial and Systems, Composites, and Textile Engineering)
- Mechanical Engineering

**Bachelor of Science degrees in these design majors:**

- Animation
- Fashion Design
- Graphic Design Communication
- Industrial Design
- Interactive Design and Media
- Textile Design
- Textile Materials Technology

**Minors**

The following minors are offered through the School of Design & Engineering.

For more information about the minors see “Minors and Concentration” section of the Academic Catalog:

- Foundation Design
- Graphic Design Communication
- Multimedia and Visualization Minor (offered with C-ABE)
- Textile Materials Technology

**Graduate Degrees**

- M.S. Industrial Design
- M.S. Interactive Design & Media  
With options:  
2-Year Program  
3-Year Program
- M.S. Textile Design
- M.S. in Textile Engineering
- Ph.D. in Textile Engineering and Science

**Combined degrees** are offered in the following areas:

- B.S. /M.S. Textile Design

**C-DEC Core Curriculum**

The Kanbar College’s core curriculum provides students majoring in design, engineering and business the ability to collaborate effectively across disciplines. In addition to studies in each major, four courses and an integrative capstone experience provide skills and knowledge that are relevant to today’s careers, transferable to other fields and practices and applicable to emerging opportunities. By gaining insights into creative processes, business models, systems thinking and tools for empathy and human understanding, students learn effective strategies for innovating. The DEC Core Curriculum broadens the expertise of any one area, adds educational value to each major and ultimately, prepares students for strategic leadership in their fields. With this foundation, C-DEC graduates will be informed and versatile professionals with knowledge and skills that are transferrable across increasingly dynamic professional boundaries.

Through the DEC Core Curriculum, students will demonstrate an ability to:

- Collaborate on multi-disciplinary teams
- Identify different problem solving and decision-making styles
- Appreciate disciplinary perspectives
- Gain insights from people, their behaviors and cultural practices to inform a project

- Evaluate the ways natural and human-made (political, social, cultural, economic) systems both shape and are influenced by new products, services or enterprises
- Adapt to continually changing professional challenges
- Integrate knowledge to find new ways of creating value

## School of Business Administration Undergraduate Programs

The School of Business Administration focuses on preparing students to become leaders in the 21st century business world. In addition to traditional business skills in accounting, marketing, finance, management, economics, etc., students gain the communication, teamwork, and problem solving skills that employers value, and that allow students to advance their careers. Through experiential, collaborative and real world experiences, students learn about business by working on actual problems and interacting with business executives.

Internships connect students to the world of business. These experiences allow students to link concepts discussed in class to real business contexts and to gain hands-on experience in a particular job, industry or company. Increasingly, employers expect college graduates to have work experience and use internships as a way to recruit talented graduates to their companies. Business students are strongly encouraged to work closely with Career Services to secure at least one internship experience as part of their educational program.

With extensive backgrounds in the world of commerce, faculty members bring their deep knowledge of business to inform their teaching and to support and advise students in the wide range of career opportunities in the field. The faculty is committed to helping students learn and advance in order to achieve their career aspirations.

Business majors are strongly encouraged to participate in the University's study abroad programs and experience the culture, language and business practices of a different country or region. The School of Business Administration is a member of AACSB International – The Association to Advance Collegiate Schools of Business – and the curricula are designed to be consistent with the guidelines set forth by AACSB International. We are also committed to becoming fully accredited by AACSB.

### *Mission*

The School of Business Administration (SBA) prepares students to be leaders in the 21<sup>st</sup>-century business world by developing the skills that employers value through our nexus learning approach that offers students experiential, collaborative and real world education.

### *School Goals and Outcomes*

In addition to providing students with the technical expertise and foundation knowledge in business, the School of Business delivers learning-centered programs that prepare students to be successful in their careers and to adapt to challenges they may face in the future. Graduates of the SBA will:

- Recognize, analyze and respond appropriately to ethical challenges in the workplace
- Have broad knowledge of the core functional areas of business, how they interrelate in complex organizational settings and in depth knowledge in their areas of concentration
- Use analytical tools to effectively evaluate quantitative and qualitative information in organizational settings
- Demonstrate effective oral, written and visual communication skills in business contexts
- **Develop the global and multi-cultural understanding necessary to be effective in the global workplace**
- Work effectively in cross-disciplinary teams to identify innovative business opportunities and to make informed decisions

## **BUSINESS CORE (B.S)**

*The checksheets can be found in the checksheets section of the catalog listed by for each concentration.*

The center of business education, the business core, provides an understanding of the functional areas of business such as accounting, economics, management, marketing and finance, and imparts a set of skills that are critical to professional success, such as communication, technology, quantitative/analytical analysis, professionalism, global perspectives and business ethics. All business students, regardless of major, complete the business core.

### *Core Learning Outcomes*

Graduates of the majors in business will demonstrate the ability to:

- Diagnose ethical dilemmas and their antecedents, propose appropriate resolutions and suggest preventative approaches using relevant professional codes of conduct
- Articulate, script and role-play appropriate courses of action to implement ethical decisions using the Giving Voice to Values methodology
- Demonstrate knowledge of core concepts in key functional business areas
- Evaluate the inter-connected relationships among the business model, the value/financial model and the business plan using fundamental business functions and tools from accounting, finance, marketing and management
- Effectively apply relevant knowledge and critical skills from their areas of concentration – see concentration specific learning outcomes
- Use information literacy skills to acquire and process the information necessary to inform business-related research or cases
- Use technology and relevant quantitative tools to analyze and draw appropriate conclusions in business-related research or cases
- Write business documents that are clear, succinct, persuasive, effectively address the target audience and purpose of the document, and that follow appropriate writing conventions
- Make oral presentations on business topics that are clear, succinct, engaging, effectively address the target audience and purpose of the presentation, and that make appropriate use of technology and visual aids
- Recognize and utilize principles related to doing business in a global environment in different business contexts
- Compare and contrast cultural differences at multiple levels (e.g., organizational, regional, national) and identify ways to leverage cultural diversity to improve business operations and practices
- Work effectively in cross-disciplinary teams
- Blend knowledge and skill sets from different disciplinary areas to identify business opportunities and to provide solutions to real-world problems

The required core courses within the business curriculum (33 credits) are as follows:

ACCT-101	Financial Accounting
ACCT-102	Managerial Accounting
BLAW-301	Business Law I
ECON-205	Macroeconomics
ECON-206	Microeconomics

FINC-301	Financial Management
MGMT-104	Management Foundations
MGMT-401	Operations Management (Fashion Merchandising and Management majors substitute FASHMGT-451, Operations and Supply Chain Management)
MGMT-490	Business Policy and Strategy (Fashion Merchandising and Management majors substitute FASHMGT-4XX, Fashion Strategy Capstone)
MKTG-104	Marketing Foundations
STAT-201	Statistics I
STAT-202	Statistics II

*Minors Within Business for Business Majors*

Business majors may choose to minor in any of the business areas. Certain majors require a minor in one of the other functional areas. For other majors, students may elect to take a minor. More information can be found in the “Minors” section of the Academic Catalog.

*Non-Business Minor for Business Majors*

Business majors, not required to minor in a “functional business area,” may choose to minor in areas outside of business. More information about non-business minors available can be found in the “Minors” section of the Academic Catalog.

*Business Minor for Non-Business Majors*

Since the focus of Philadelphia University is on professional education, many graduates, whether architects, textile engineers or biologists, are interested in developing a firm foundation in business in preparation for work in an organization, or to gain additional useful and marketable skills upon graduation. The business minor for non-business students provides a foundation in a broad range of business subjects. Additionally, since all of the courses in the minor are required foundation courses for the M.B.A. program, students completing the minor may be able to waive some pre-M.B.A. coursework. This information is also in the “Minors” section of the Academic Catalog.

The business minor is a total of 12 credit hours of study in business selected from the following courses:

Required (6 to 9 credit hours):

ACCT-101	Financial Accounting
ECON-205	Macroeconomics and/or
ECON-206	Microeconomics

Choose additional courses to total 12 credits hours from:

BLAW-301	Business Law I
ACCT-102	Managerial Accounting (prerequisite ACCT-101)
FINC-301	Financial Management (prerequisites ACCT-101, and STAT-201 or MATH-321)

## **BUSINESS CONCENTRATIONS**

### **ACCOUNTING CONCENTRATION**

#### *Program Description*

Accountants are skilled professionals who develop and examine the financial reporting and control systems used by business organizations, agencies and individuals to keep track of money, goods and services. The Accounting concentration can lead to careers in public, private or government accounting, as well as banking, finance and other management specialties.

Industry sources agree that the future of the accounting profession is bright. Today's accountants are more technologically sophisticated. In addition, government regulations, the dynamics of the economy, public demands for improved government performance and global business competition all increase the need for liberally-educated accountants.

A sequence of business and general education courses prepares accounting graduates for all facets of the business world. Electives in specialties within the profession, such as tax accounting, are offered. Many students obtain C.P.A. (Certified Public Accountant) accreditation after graduation.

Beyond the traditional four-year BS program students have an opportunity to pursue a five-year BS/MBA degree program with an accounting or taxation option. At the end of the five-year BS/MBA students will have:

- Met the 150 credit hour requirement to become a CPA
- Earned a BS degree (this degree is earned after four years)
- Earned an MBA degree with an accounting or a taxation option
- Sat for the CPA examination with the opportunity to graduate having completed all four sections of the examination
- Experienced an internship worth up to six college credits (optional) adding significant career marketability

For more information about the five-year joint degree program, please contact the M.B.A. Program Director.

#### *Program Learning Outcomes*

Students graduating with a concentration in accounting will be able to:

- Demonstrate an awareness of the common body of knowledge in accounting and managerial accounting and the recognized sources of that knowledge
- Apply this theoretical knowledge in practical business situations, including financial statement preparation and analysis, auditing and federal taxation that require decision-making based on financial information.

### **FINANCE CONCENTRATION**

#### *Program Description:*

Knowledge of finance is critical for the success and survival of any business organization. Thus there will always be demand for well-trained finance graduates. Finance concentrators study three interrelated areas of finance: financial markets and financial institutions, investments and portfolio management, and financial management. Decision-making, quantitative, analytical and computer skills are developed, and a global perspective is emphasized as they are all critical for managerial decision-making.



A degree in finance prepares students for career opportunities in a broad array of industries such as commercial banking, investment banking, securities brokerage, insurance, corporate finance, credit management, risk management, real estate, financial analyst and personal financial planning. Many students find the finance major to be the ideal preparation for starting their own business or contributing to the family business.

*Program Learning Outcomes:*

Students graduating with a concentration in finance will be able to demonstrate effective problem solving skills in assessing and solving financial problems and tapping opportunities faced by domestic and international businesses.

### **INTERNATIONAL BUSINESS CONCENTRATION**

*Program Description*

To strengthen their competitive edge in a global economy, U.S. and foreign firms must attract managers who possess a strong functional background, area training and comprehensive international business skills. The International Business concentration is designed specifically to meet these industry needs. This program enables students to combine an international business concentration with a traditional functional area such as accounting, finance, management or marketing.

The International Business concentration is unique because it consists of seven highly integrated components, providing our graduates with the skills and the training expected in industry:

- College Studies
- Foreign language
- Area studies
- Business core courses
- International Business
- Functional Business competence and
- Study or work abroad

Graduates traditionally have a sense of adventure, are adaptive to new environments and join global U.S. firms or foreign companies operating in the United States.

*Program Learning Outcomes*

Students graduating with a concentration in international business will be able to:

- Demonstrate a competence in a chosen secondary area in business
- Demonstrate proficiency in an appropriate second language
- Demonstrate an understanding of the inherent risks of doing business in foreign countries and how to manage such risks

### **MANAGEMENT: LEADERSHIP AND INNOVATION IN ORGANIZATIONS CONCENTRATION**

*Program Description:*

This unique program focuses on how managers and leaders can create conditions for innovation and growth at the individual, team and organizational levels. Students explore the practices, processes and structures necessary to enable organizations to innovate, examining the innovation process in organizations ranging from startups to mature businesses. Students evaluate how to balance the

challenges of organizing, managing and leading innovation with the need to produce concrete, routine and expected outcomes within the organization.

Management concentrators must specialize in another business area through a double concentration or the minor program. In that way, students broaden their expertise by combining management courses with other career areas, such as accounting, finance, fashion industry management, marketing, international business or psychology.

Philadelphia University graduates are using management skills in a wide variety of settings: in small, mid-size and large organizations; and in areas including retailing, banking and finance, insurance, global manufacturing and service firms and public agencies.

*Program Learning Outcomes:*

Students in the Management: Leadership and Innovation in Organizations concentration will be able to appraise their strengths and weaknesses as future leaders and managers of innovative teams and organizations, and articulate plans to enhance their leadership and management skills.

## **MARKETING: CONSUMER INSIGHT AND INNOVATION CONCENTRATION**

*Program Description:*

The Marketing: Consumer Insight and Innovation concentration focuses on helping students design and orchestrate strategies that underlie successful organizational marketing practices in an increasingly uncertain and competitive environment. Building on their DEC coursework, students utilize a range of creative, analytical and technical processes to generate ideas and transform those ideas into marketing strategies. Exploring and applying quantitative and qualitative techniques for identifying consumers' needs, they gain experience turning marketing concepts into reality.

Students develop skills to analyze demand and market segments, design marketing and advertising budgets and campaigns and formulate a comprehensive marketing plan. Students will develop a conceptual understanding of the complex and changing environmental factors that affect the marketing decision-making process.

*Program Learning Outcomes:*

Marketing: Consumer Insight and Innovation concentration students will be able to utilize observational and quantitative research outcomes, and relevant elements of the marketing mix, to develop an innovative, consumer-centric, marketing plan for a real organization.

## **FASHION MERCHANDISING AND MANAGEMENT DEGREE (B.S.)**

*The checksheets can be found in the checksheets section of the catalog listed by for each concentration.*

Advancements in technology and globalization of the marketplace make the fashion industry an ever-changing, challenging place to work. This billion-dollar industry needs bright, talented executives to guide the rapid pace of today's technological revolution. Skilled managers are required to deal with an increasingly complex variety of products and manufacturing techniques and tasks, such as planning product lines months before they will appear in the stores. Once developed, new products must be sourced globally and then delivered to the consumer within a very short period of time.

The Fashion Merchandising and Management curriculum combines the fundamentals of business, including accounting, economics, marketing, finance and management, with textile and apparel courses taught by industry savvy professionals. Students learn the process of apparel design and manufacture from fiber to final apparel product, and become familiar with the application of computers in information retrieval, integrated apparel manufacturing, design and merchandising. Students are also involved in the process of selection, procurement and distribution of products in a retail setting. Furthermore they learn the significance of product execution through presentation.

The Fashion Merchandising and Management Degree exposes students to the diverse career opportunities in this burgeoning field.

- Students work with industry professionals and students from different disciplines on collaborative industry projects for companies like QVC, Maidenform, Cotton Inc., Toys R Us and Target.
- Curricular focus is on the entire fashion value chain: fiber/yarn/fabric and material development, sourcing & production, merchandising, branding and marketing.
- Faculty-led short courses abroad and semester-long study abroad experiences in China, Paris, London, Milan, Rome and India add an unparalleled international dimension to the program.
- Guest speakers visit campus regularly to share their expertise, past visitors have included: Tommy Hilfiger; Mary Dougherty, owner of Nicole Miller stores; Nordstrom's store manager; Elizabeth Wellington, fashion journalist for The Philadelphia Inquirer; Jim Schwartz, EVP at Mast Industries/Limited Brands; and a buyer for QVC.
- Student have access to a variety of coveted internships with brands such as Coach, Urban Outfitters, Anthropologie, Lily Pulitzer, Tommy Hilfiger, Macy's, Under Armour, The Limited Brands, QVC and Charming Shoppes.
- The program prepares students to enter the fashion industry through a variety of career paths including: marketing and branding, merchandising and buying, sourcing, product development and styling.

## **CONCENTRATIONS**

### **FASHION INDUSTRY MANAGEMENT CONCENTRATION**

#### *Program Description:*

The Fashion Industry Management concentration exposes students to the entire fashion value chain from the background of fiber composition to the final branded product, focusing on the efficient and effective delivery of quality merchandise to consumers. Students are immersed in the techniques and business practices needed to implement competitive production systems for today's global marketplace. Students learn to make tactical supply chain decisions, to develop global sourcing strategies and to utilize cutting-edge industry software, all in the context of and global marketplace.

The Fashion Industry Management program is one of a select few endorsed by the American Apparel and Footwear Association.

#### *Program Learning Outcomes:*

Students graduating with a concentration in fashion industry management demonstrate foundational knowledge in the theory and practice of the fashion value chain.

## **FASHION MERCHANDISING CONCENTRATION**

### *Program Description*

Fashion merchandising is part of the dynamic and exciting fashion industry and plays a central role in retailing. The merchandiser is responsible for understanding the needs and demands of the consumer. Consumers' needs are influenced by lifestyle and changes in the environment. The merchandiser is responsible for selecting and procuring merchandise from all over the world, ensuring that the store has a proper assortment of goods. Technology plays an important role by enabling merchandisers to predict needs, provide the merchandise in a timely manner and insure an inventory that is well-balanced.

Positions in merchandising include buyers, department managers, merchandising managers, fashion coordinators, product developers and merchandise planners.

### *Program Learning Outcomes*

Students graduating with a concentration in fashion merchandising demonstrate foundational knowledge of the business of fashion, fashion merchandising and the operation of the retail industry.

## **JOINT B.S. BUSINESS/M.B.A. PROGRAM**

The School of Business Administration offers a joint Bachelor of Science in Business and Master of Business Administration (B.S./M.B.A.) program to qualifying students. Accepted students are permitted to take some graduate-level courses in their fourth year of undergraduate study that also count toward graduate program requirements. Typically, a fifth year is required to complete the graduate requirements, depending on the major/concentration.

The joint program provides a valuable option to students who may wish to further strengthen their business competencies, credentials and marketability. Students may plan to follow this program as early as the freshman year and no later than the start of the senior year. Application should be made through Philadelphia University's Graduate Admissions Office after consultation at the Office of Graduate Studies.

Transfer students may also apply. Currently enrolled students will be considered for admission if they have maintained a 3.0 grade point average. The Graduate Management Admission Test® (GMAT®) is required for full acceptance to the program and must be taken before the end of the senior year.

Non-business majors interested in the Joint B.S./M.B.A. Program should obtain a copy of the "Pre-M.B.A. Requirements for Non-Business Majors: Planning Guide." The planning guide should be used in combination with the Academic Catalog and the check sheet for the student's undergraduate major. The guide describes the requirements for admission and the application process, as well as the Pre-M.B.A. course requirements. Planning guides are available at the DEC Graduate Studies Office.

## School of Business Administration Graduate Programs

### MASTER OF BUSINESS ADMINISTRATION

MBA Program Director: D.K. Malhotra, Ph.D.

#### *Mission*

The Philadelphia University M.B.A. prepares students, with or without undergraduate degrees in business, for careers in organizations that are profitable, sustainable, and ethically grounded. The M.B.A. unites perspectives from across the business disciplines, housed in a design and integrative thinking strategic framework, and emphasizes leadership skills, the ability to apply knowledge in dynamic situations and the ability to adapt and innovate to meet 21<sup>st</sup>-century business and economic challenges.

#### *Program Learning Outcomes*

M.B.A. graduates will:

- Demonstrate disciplinary competency and be able to apply and integrate this knowledge.
- Demonstrate competency in interpersonal, team and relationship management.
- Identify, analyze, and formulate appropriate responses to ethical dilemmas, as well as have the skill to effectively implement the determined course of action.
- Bridge prior work experience and practice with the concepts and skills learned in the M.B.A. program.
- Be prepared to effectively adapt to future changes.

The School of Business Administration is a member of AACSB International – The Association to Advance Collegiate Schools of Business – and the curricula are designed to be consistent with the guidelines set forth by AACSB International. We are also committed to becoming fully accredited by AACSB.

#### *Program Format*

The M.B.A. is available in two formats: an evening format and one-year day format.

The Evening M.B.A. Program allows students working full-time to complete the program on a part-time basis in as little as 18-24 months. Every M.B.A. candidate participating in the Evening M.B.A. Program will select a three-course, 9-10 credit hour option or focus of study in an area of business. These options are described below.

The One-Year Day M.B.A. Program of study allows recent college graduates to complete the degree in one year of full-time coursework. In lieu of a concentration, One-Year Day M.B.A. Program students complete a required internship and participate in a ten-day overseas trip where they meet with business leaders and academicians in European or Asian countries. The trip is also open to evening students as an elective.

Regardless of format, the M.B.A. is taught by faculty with a unique combination of practical experience and theoretical knowledge who are involved in research and also consult with domestic and international corporations. Small class sizes allow for personal attention.

### *Foundation Courses*

Foundation courses serve as prerequisites for entrance into the M.B.A. Program. Foundation course requirements are streamlined to allow easier access to the M.B.A. program, particularly for individuals entering formal business education for the first time. In any given semester, the graduate foundation “MBF” courses (listed below) are typically offered in an online format.

MBF503	Foundations of Economic Analysis
MBF504	Introduction to Financial and Managerial Accounting
MBF505	Financial Management
MBF506	Marketing Foundations (1.5 credits)
MBF508	Statistical Analysis for Business Decisions
MBF509	Management Concepts (1.5 credits)
MBF510	Operations Management

### *Waiver of Foundation Courses*

Students with satisfactory equivalent undergraduate or graduate records may have some or all of these foundation courses waived. To be exempt from foundation courses the following criteria must be met:

- A grade of “B-” or better in undergraduate equivalents.
- Waived courses must be approved by the M.B.A. Program Director.
- Courses must have been taken within seven years of matriculation into the M.B.A. program.
- Undergraduate equivalents must be from an accredited university or college.

Prospective students with significant business experience in a given area may waive one or more foundation courses by satisfactorily completing a proficiency examination offered by the University or satisfactorily performing on the appropriate College Level Examination Program (CLEP) offered by the Educational Testing Service, Princeton, New Jersey.

### **Evening M.B.A. Program**

The Evening M.B.A. Program responds to the needs of students working full-time, allowing them to acquire a broad breadth of real-world business understanding while concentrating in an area of specific interest. The program format allows students to share their learning with students who have a similar depth of work experience. Regardless of concentration, M.B.A. students take a 24 credit hour set of core courses. This, along with 9 to 10 credit hours of concentration courses equals 33 or 34 total credits.

#### **MBA CORE COURSES: 24 CREDITS**

MBA625	Management Communications and Negotiations
MBA626	Global Managing in the 21st Century
MBA627	Management of Information through Technology
MBA628	Accounting for Management Decisions
MBA629	Financial Policy and Planning
MBA630	Quantitative Methods in Decisions
MBA632	Strategic Marketing Management
MBA642	Strategic Planning in a Global Environment

#### **ACCOUNTING OPTION\* COURSES: 10 CREDITS**

MBA-CPA

MBA741 Financial Accounting and Reporting I (FAR)  
MBA742 Financial Accounting and Reporting II (FAR)  
MBA751 Audit and Attestation (AUD)

TOTAL CREDIT HOURS: 34 Credits

\* Students with an undergraduate degree in accounting, or significant undergraduate accounting coursework, can earn an MBA and be ready to sit for the CPA exam upon completion of the program. Students who opt to can participate in the Becker CPA review course (which includes coursework, flashcards and exam review). For eligible students, scholarship support is available to help defray the costs of both the review course and the cost of sitting for the CPA exam. The level of scholarship support is based on students' undergraduate GPA and GMAT exam scores.

FINANCE OPTION COURSES: 9 CREDITS

MBA772 Investment and Portfolio Management

Select two of the following:

MBA771 Financial Markets and Institutions

MBA774 International Finance (may be taken with MBA792 International Business trip for an additional three elective credits)

MBA775 Seminar in Finance

MBA776 Speculative Markets

MBA777 Fixed Income Securities

MBA778 Commercial Banking

TOTAL CREDIT HOURS: 33 Credits

INTERNATIONAL BUSINESS OPTION COURSES: 9 CREDITS

MBA740 International Business (6 credits)

Select one of the following:

MBA758 International Perspectives of Human Resource Management

MBA764 Global Marketing

MBA774 International Finance

TOTAL CREDIT HOURS: 33 Credits

MARKETING OPTION COURSES: 9 CREDITS

MBA762 Marketing Research

Select two of the following:

MBA740 International Business (6 credits; fulfills Marketing requirement)

MBA761 Promotion Management

MBA764 Global Marketing

MBA766 Business-to-Business Marketing

MBA780 Fundamentals of E-Commerce

TOTAL CREDIT HOURS: 33 Credits

TAXATION OPTION\* COURSES: 9 CREDITS

MBA-CPA

TAX660 Individual Taxation

TAX662 Corporation Taxation

TAX664 Tax Research

TOTAL CREDIT HOURS: 33 Credits

\* Students with an undergraduate degree in accounting, or significant undergraduate accounting coursework, can earn an MBA and be ready to sit for the CPA exam upon completion of the program. Students who opt to can participate in the Becker CPA review course (which includes coursework, flashcards and exam review). For eligible students, scholarship support is available to help defray the costs of both the review course and the cost of sitting for the CPA exam. The level of scholarship support is based on students' undergraduate GPA and GMAT exam scores.

BUSINESS ADMINISTRATION OPTION:

Students select nine credits from any of the options listed above

TOTAL CREDIT HOURS: 33 CREDITS

### **One-Year Day M.B.A. Program**

The full-time One-Year Day M.B.A. Program responds to the needs of recent college graduates. The program format allows students to share their learning experiences with students who have similar goals and needs. A small, select group of students proceed through the program together while taking all of their classes during the day.

All M.B.A. prerequisites must be completed before beginning the program. The program begins in late July with intensive daily class meetings. Fall and Spring classes follow a Tuesday/Thursday format, with students completing a two-semester, faculty-guided business internship on Mondays and Wednesdays. A highlight of the spring semester is the International Business trip to Asia or Europe. Students are exposed to top-level decision makers in business, labor and government through meetings in the corporate headquarters of financial institutions and production companies.

### *Day M.B.A. Summer Start curriculum & schedule*

Complete any outstanding Foundation Courses

### LATE JULY AND AUGUST

MBA625 Management Communications and Negotiations

MBA628 Accounting for Management Decisions

### FALL SEMESTER

Tuesday/Thursday

MBA626 Global Managing in the 21st Century

MBA627 Management of Information through Technology

MBA630 Quantitative Methods in Decisions

Monday/Wednesday

MBA791 Internship

### SPRING SEMESTER

Tuesday/Thursday

MBA629 Financial Policy and Planning

MBA632 Strategic Marketing Management



MBA642 Strategic Planning in a Global Environment  
MBA792 International Business Trip  
Monday/Wednesday  
MBA791 Internship  
TOTAL CREDIT HOURS: 33 Credits

### **Non-Degree Graduate Business Offerings**

#### **Pre-Master's Graduate Coursework**

In any given semester, the graduate foundation "MBF" courses (listed below) are typically offered in an online format. These courses also serve as prerequisite courses for the MBA.

MBF503 Foundations of Economic Analysis  
MBF504 Introduction to Financial and Managerial Accounting  
MBF505 Financial Management  
MBF506 Marketing Foundations (1.5 credits)  
MBF508 Statistical Analysis for Business Decisions  
MBF509 Management Concepts (1.5 credits)  
MBF510 Operations Management

If you are interested in learning more about these courses, please contact the MBA Program Director.

#### **Post-Master's Graduate Coursework**

Post-Master's graduate coursework is designed for the working professionals who hold an M.B.A. and who seek to develop additional skills in another option area.

Students may focus coursework in the following areas:

- Accounting
- Finance
- Health care Management
- International Business
- Marketing
- Taxation

If you are interested in learning more about the Post-Master's graduate coursework, please contact the MBA Program Director.

## **MASTER OF SCIENCE IN FASHION APPAREL STUDIES**

Program Director: Jeremy Rosenau

### *Mission*

The Master of Science in Fashion Apparel Studies program provides students with strategic, tactical and operational skills necessary to succeed in the global apparel arena.

### *Program Goals*

Students will develop effective communication skills, have a robust understanding of the complexities of all relationships in the global apparel and textile supply chain, be able to apply current technology in the apparel industry to make value maximizing decisions and apply critical thinking to meet the unique challenges of the global apparel industry.

### *Program Learning Outcomes*

Graduates of the M.S. in Fashion Apparel Studies will demonstrate the ability to:

- Develop and implement key apparel business functions within a global environment
- Identify the multi-cultural influences on the ethical conduct of business throughout the global apparel and textile supply chain
- Apply new technology to analyze the costs and benefits, return on investment (ROI), leasing, increase in speed to market and process of implementation
- Integrate knowledge from other related disciplines to discover, develop and defend innovative solutions for solving complex problems facing the fashion and apparel industry

### *Curriculum*

Graduate students with differing professional goals and interests are brought together in common courses and the seminar program. The curriculum includes core and elective courses and a choice of writing a Research Paper or writing and defending a Thesis.

#### FOUNDATION COURSES (must be taken prior to the M.S. in Fashion Apparel Studies)

MBF501	Introduction to Computer Skills (1 credit)
MBF504	Introduction to Financial and Managerial Accounting
MBF505	Financial Management
MBF508	Statistical Analysis for Business Decisions
TEXT101	Survey of Textile Industry
FASHMGT101	Survey of the Global Apparel Industry
FASF501	Garment Development
FASF505	Apparel Production
FASF510	Apparel Work Measurement

RESEARCH PAPER OPTION: TOTAL CREDIT HOURS: 37 Credits

#### CORE COURSES: 22 CREDIT HOURS

FAS611	Product Development (3 credits)
FAS612	Implementation of New Technologies (3 credits)
FAS621*	Global Marketing and Sourcing Strategies (3 credits)
FAS732	Global Textile and Apparel Industry Seminar (1 credit)
FAS734*	Inventory & Logistics Management in the Global Supply Chain (3 credits)
FAS790*	Textile and Apparel Business Policy and Strategic Planning (3 credits)
MBA628*	Accounting for Management Decisions (3 credits)
TXE 759	Product Evaluation (3 credits)

#### ELECTIVES: 12 CREDIT HOURS

(No more than 6 credit hours may be taken in business courses, indicated by \*)

FAS622*	Distribution Management (3 credits)
FAS631*	Computer Integrated Management (3 credits)
FAS632	Systems Engineering (3 credits)
FAS731*	Textile Marketing (3 credits)

FAS791	Internship (3 credits)
MBA625*	Management Communications and Negotiations (3 credits)
MBA759*	Entrepreneurship (3 credits)
MBA762*	Market Research (3 credits)
MBA764*	Global Marketing (3 credits)
TXD665	Design Management (3 credits)
TXE721	Analytical Methods (3 credits)
TXE762*	Textile and Apparel Operations Management (3 credits)
TXE790	Quality Management (3 credits)
FAS 763	Research Paper (3 credits)

RESEARCH COURSEWORK: 3 Credit Hours

FAS 763	Research Paper (3 credits)
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THESIS OPTION: TOTAL CREDIT HOURS: 34 Credits

CORE COURSES: 22 CREDIT HOURS

FAS611	Product Development (3 credits)
FAS612	Implementation of New Technologies (3 credits)
FAS621*	Global Marketing and Sourcing Strategies (3 credits)
FAS732	Global Textile and Apparel Industry Seminar (1 credit)
FAS734*	Inventory & Logistics Management in the Global Supply Chain (3 credits)
FAS790*	Textile and Apparel Business Policy and Strategic Planning (3 credits)
MBA628*	Accounting for Management Decisions (3 credits)
TXE 759	Product Evaluation (3 credits)

ELECTIVES: 6 CREDIT HOURS

(No more than 3 credit hours may be taken in business courses, indicated by \*)

FAS622*	Distribution Management (3 credits)
FAS631*	Computer Integrated Management (3 credits)
FAS632*	Systems Engineering (3 credits)
FAS731*	Textile Marketing (3 credits)
FAS791	Internship (3 credits)
MBA625*	Management Communications and Negotiations (3 credits)
MBA759*	Entrepreneurship (3 credits)
MBA762*	Market Research (3 credits)
MBA764*	Global Marketing (3 credits)
TXD665	Design Management (3 credits)
TXE721	Analytical Methods (3 credits)
TXE762*	Textile and Apparel Operations Management (3 credits)
TXE790	Quality Management (3 credits)

THESIS COURSEWORK: 6 CREDIT HOURS

FAS923	Thesis Preparation (2 credits)
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FAS941 Thesis (4 credits)

## **MASTER OF SCIENCE IN TAXATION**

The M.S. in Taxation is geared to practicing accountants in the fields of public, corporate and governmental accounting, and to lawyers, financial managers and planners who need extensive information and formal study in taxation. The program is practitioner-focused and is strongly linked to business practice. Outstanding faculty brings the highest level of expertise into the classroom. Students select from an innovative and state-of-the-art curriculum. Computer applications are integrated in the total curriculum where appropriate. All courses are taught based on the most up-to-date tax laws, and the implications of proposed changes in tax legislation will be discussed. Students may take courses toward the degree or as Continuing Professional Education (CPE) credits to meet bi-annual state CPE requirements to maintain their C.P.A. license or to enhance their expertise in a specific topic.

### *Program Learning Outcomes*

Graduates of the M.S. in Taxation will:

- Demonstrate professional communication and negotiation skills.
- Integrate, analyze and apply business research.
- Identify and evaluate major global, management and ethical issues.
- Comprehend and apply quantitative and financial methods to business problems.
- Investigate, deconstruct and propose strategic solutions to firms' decision-making process.

The distinguished faculty includes partners and managers from national, regional and local C.P.A. firms and governmental entities; noted tax attorneys; and specialists in many tax areas such as real estate, financial planning, state and local taxation, and estate and gift taxation.

### *Course Requirements*

The basic course content of all core and elective courses presumes students' undergraduate degrees include the following foundation courses:

#### FOUNDATION COURSES

MBF503	Foundations of Economic Analysis
MBF504	Introduction to Financial and Managerial Accounting
MBF511	Decision Making in the Legal Environment of Business

#### CORE COURSES 18 CREDITS

TAX660	Individual Taxation
TAX662	Corporation Taxation
TAX664	Tax Research
TAX765	Taxation of Flow-Through Entities
TAX793	State and Local Taxation
TAX795	Estate and Gift Taxation

#### ELECTIVES 12 CREDITS

(A minimum of four elective courses in taxation.)

TOTAL CREDIT HOURS: 30 Credits

*Waiver of Foundation Courses*

Students with satisfactory equivalent undergraduate or graduate records may have some or all of these foundation courses waived. To be exempt from the foundation courses, the following criteria must be met:

- Grades of "B-" or better in undergraduate equivalents. Waived courses are to be determined by the C-DEC Associate Dean of Graduate Studies.
- Seven-year time limit between date of matriculation into the M.S. in Taxation program and time when undergraduate course was taken.
- Undergraduate equivalents must be from an accredited university or college.

Upon successful completion (or waiver) of the foundation courses, students enroll in the core courses of the M.S. in Taxation program. The foundation courses must be completed or waived before enrolling in core courses.

## School of Design and Engineering Undergraduate Programs

The School of Design and Engineering provides both in-depth exploration of the individual design and engineering disciplines and interdisciplinary collaboration opportunities that frequently involve real clients. Through curricular integration of design, engineering and business disciplines, students develop a thorough understanding of the professional dynamics that exist between these fields. Areas of study within the School of Design and Engineering include animation, engineering, fashion design, graphic design, industrial design, interactive design and media, textiles and textile design.

Designers track changes in science, technology and in society. Through their work, they express the meaning of these changes and they maximize the opportunities these changes bring to our lives. In the process of interpreting change for the benefit of people, designers are shaping contemporary culture. Engineers apply the principles of mathematics and the laws of natural science to analyze, design, develop and devise improvements that benefit humanity. The engineering major provides for flexibility to address the unknown technical challenges that will confront society.

As change continues to accelerate, design and engineering influence delivers an unparalleled value to clients and employers. Designers are sought-after collaborators because of their ability to create synergy between the objectives of many other professions.

Our graduates are multi-dimensional professionals with a broad-based skill set and solid critical thinking abilities. The faculty of practicing professionals, state-of-the-art facilities, study abroad opportunities and our collaborative approach to learning all contribute to creating a unique, nurturing, exciting and creative environment within our school.

### *Retention of Student Work*

Projects completed by students in studio, laboratory or engineering courses may be selected to become part of the University's collection for purposes of exhibition review or accreditation. Student work not selected for that purpose will be stored for only 30 days into the following semester.

## **B.S.E. ENGINEERING PROGRAMS**

### *Mission*

The mission of the undergraduate engineering programs is to continue the legacy of providing excellence in engineering education by developing creative problem solving, technical skills, and opportunities for collaborative learning among engineering, design and business disciplines. The Engineering programs provide students the necessary knowledge and analytical skills for professional engineering practice or for successful graduate studies.

### *Engineering Programs Learning Outcomes:*

As graduates of the undergraduate engineering programs, students will demonstrate:

- An ability to apply knowledge of mathematics, science and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate and solve engineering problems.

- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- An understanding of the impact of engineering solutions in a global, economic, environmental and societal context.
- A recognition of the need for, and an ability to engage in, lifelong learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Program descriptions of each engineering major follow.

### **ENGINEERING B.S.E.**

*The checksheet for this program can be found in the checksheet section of the catalog.*

#### *Program Description*

Because of its general nature, the BSE in Engineering major is characterized by breadth and permits study in depth, of a minor field, such as architectural engineering, composites engineering, industrial and systems engineering or textile engineering. Students choose their minor engineering track in their sophomore year. This engineering major provides flexibility to address the unknown technical challenges that will confront society.

The B.S.E. Engineering program incorporates the contemporary thinking related to engineering education that has been studied in the National Academy of Engineering publication “The Engineer of 2020 – Visions of Engineering in the New Century.”

The B.S.E. Engineering program prepares graduates who will have the ability:

- To pursue a career in engineering closely related to their minor discipline.
- To pursue advanced studies in a wide variety of engineering disciplines, including but not limited to textile, architectural or industrial and systems engineering.
- To pursue lifelong learning in their chosen field and remain active in professional societies.
- To make scholarly contributions to their field through publications, technical reports and technical presentations.
- To conduct applied research and development across disciplines to advance engineering.

### **MECHANICAL ENGINEERING (ME) B.S.E.**

*The checksheet for this program can be found in the checksheet section of the catalog.*

#### *Program Description*

The B.S.E. in Mechanical Engineering Program provides a broad-based education with a concentration on fundamentals and basic laws in mechanical, thermal and fluid sciences. The development of math, science and engineering skills in students are adequately addressed in the choice of courses. Engineering design is part of many of the courses from the very first semester. Further emphasis on design is placed on courses such as machine design, design for manufacturability and the two-semester senior design project. Students are given ample opportunity to use modern computer-aided design and mathematical modeling tools. Students also develop skills to apply the theory to design experiments that demonstrate their understanding of fundamental laws in thermodynamics, fluid mechanics and mechatronics.

Within the first few years following graduation from the mechanical engineering program, graduates may pursue graduate degrees or work as professionals in an area closely related to mechanical engineering, pursuing licensure and advancing professionally with confidence and experience in one or more of the engineering disciplines of mechanical, mechatronics, thermal and fluid systems.

The Mechanical Engineering program prepares graduates to achieve one or more of the following:

- Pursue a career in mechanical engineering or a related field.
- Pursue advanced studies in mechanical engineering or related technical areas such as systems control, biomedical, robotics, fluids and other engineering disciplines.
- Successfully pursue lifelong learning in areas relevant to their long-term goals and engage in contributing to professional societies.
- Make scholarly contributions by publishing papers and/or technical reports, delivering presentations in conferences, or contributing to engineering publications.
- Conduct applied research and development across disciplines to advance technology and foster innovative techniques.

## **ANIMATION**

*The checklist for this program can be found in the checklist section of the catalog.*

### *Mission*

The mission of the Animation program is to instruct students to become professionals who produce animation for broadcast, feature films, simulations, and interactive venues such as the web, video games and museum exhibits. Through a mix of projects ranging from abstract music-based compositions to fully articulated 3D characters, students combine their foundation in design with in-depth studies of motion, storytelling and the history of the medium.

### *Program Learning Outcomes*

Students who graduate from the animation program will:

- Develop a rich and rigorous creative process for animated work
- Apply robust technical knowledge, a firm grasp of narrative and principles of design to the execution of animated work
- Demonstrate professionalism and entrepreneurialism in the course of their animation careers
- Analyze animated work with an informed understanding of history and culture

### *Program Description*

First-year students in Animation are quickly immersed in the Philadelphia University design community, taking foundation classes with graphic designers, interactive designers, fashion and textile designers. In their second year, students begin their studies in animation with introductory courses in animation, storytelling and storyboarding, and 3D modeling. They also continue to improve their design and communication skills with advanced foundation classes covering typography, hierarchy and image making. One focus for third-year students is basic animated filmmaking. Using industry standard software, students learn to design, model and animate compelling 3D characters and environments. They also use 3D imagery as an element in their study of motion graphics, combining them with video and 2D imagery to create uniquely designed visual narratives. Both areas of study are infused with a thorough understanding of the principles of animation design and regular screenings of historic and contemporary examples.



Several electives allow students to focus on areas of particular interest, including animation history, video, and animation for gaming and interactivity. Students are encouraged to supplement their education by taking advantage of internships, design job fairs, study abroad opportunities and memberships in professional organizations. Students also pursue studies that integrate their knowledge of animation with other aspects of contemporary culture and the needs of the modern marketplace.

Students in their final year continue in their advanced 3D and 2D studies as they plan and implement short films. These films encompass every phase of production and serve as the capstone to their animation education. At the end of the year, students publicly exhibit their films alongside the work of their fellow design colleagues.

## **FASHION DESIGN**

*The checksheet for this program can be found in the checksheet section of the catalog.*

### *Mission*

The Fashion design program mission is to establish a program focused on the development of professional skills and creativity supported by a base of liberal arts and to promote student expression of personal design philosophy in consideration of client and societal needs. The fashion design program fosters an environment that supports inventiveness and excellence, cultivates critical thinking and the application of theoretical knowledge in the resolution of design problems. The curriculum promotes an aesthetic understanding that is confluent with the technical aspects of the discipline. It enables students to build on existing artistic concepts and the ability to adapt to consumer needs. In addition, the mission is to train student designers to have vision for the future; to problem solve, to communicate with a vast world requiring quick response and to contribute to the global marketplace.

### *Program Learning outcomes:*

Students who graduate from the fashion design program will:

- Apply conceptual and critical thinking skills to demonstrate the theoretical foundation of the profession.
- Perform a broad base of technical skills and technology required of the profession.
- Utilize quantitative reasoning, verbal, written and visual skills effectively.
- Demonstrate understanding of business practice and ethics.
- Possess skills to make contributions to the global fashion industry.
- Examine global and cultural issues as they affect the world.

### *Program Description:*

The Fashion Design program at Philadelphia University is globally recognized for its team-oriented designers who understand the interrelationship of design, production and commerce while creatively answering the ever-changing needs of the fashion marketplace. As an integral part of the College of Design, Engineering and Commerce, fashion designers work on industry-related and interdisciplinary projects to develop sophisticated and unique solutions to challenging problems.

First-year students receive a thorough grounding in design and drawing foundations and are immediately challenged to apply those concepts to develop real-world products. The professional studies courses in combination with liberal arts provide the basis for lifelong learning habits in the newest industry methods, critical-thinking, communication and leadership skills.

Second- and third-year students broaden their technical skills while refining their market research, design and production abilities. Projects provide a range of opportunities for students to hone their personal interests in specific markets, textile design, or cutting-edge computer aided design and

manufacturing technology. With exposure to the history and newest developments in textiles, students have the unique opportunity to create their own materials and develop unique clothing with a practical yet artistic voice.

Senior year students create collections culminating in varied opportunities for employment. These culminating experiences provide students with a springboard to highlight their interests and talents while strengthening their personal growth. They are prepared for a successful transition into studios in various markets ranging from couture to fast-fashion, from design assistants to entrepreneurs.

Fashion Design students have an opportunity to add an international dimension to their education by participating in the Study Abroad Program during their first or third year of study. Students studying overseas gain a cross-cultural experience while broadening their design skills, enabling them to strengthen their competitive edge in the global marketplace.

### **GRAPHIC DESIGN COMMUNICATION**

*The checksheet for this program can be found in the checksheet section of the catalog.*

#### *Mission*

The mission of the Graphic Design Communication program is to instruct learners to become graphic design professionals and design strategists with innovative spirits and superior critical thinking skills applicable to a diversity of human needs.

Consistent with the overall mission of Philadelphia University to provide professional training with a rigorous Liberal Arts and Business core, the Graphic Design Communication curriculum fosters an appreciation for design as a cultural craft with a relevant historical background and a rapidly evolving future that includes multiple disciplines. The program seeks to develop students who can contribute intelligently and responsibly at a global level to further the common good.

#### *Program Learning Outcomes:*

Graduates of Graphic Design Communication will demonstrate the ability to:

1. Solve complex communication design problems.
  - Identify communication design problems to support viable solutions.
  - Conduct research and analysis to shape solutions.
  - Generate and/or prototype multiple solutions to discover possibilities.
  - Evaluate outcomes to measure levels of success.
  - Collaborate productively in interdisciplinary teams.
  - Adapt to continually changing professional challenges.
  - Evaluate the intended audience in order to focus on their needs.
  - Demonstrate visual literacy as exemplified through means such as composition, hierarchy, typography and creation of meaningful images
  - Display proficiency in the use of tools and technology related to the discipline.
2. Justify design decisions through effective communication.
  - Frame visual and verbal responses to communication design problems through the use of research.
  - Articulate objectives using written and oral communication.

3. Interpret the role design can play within global contexts.
  - Evaluate the role of design within contemporary and historical contexts.
  - Apply design principles within diverse social, disciplinary and economic frameworks.
  - Analyze complex, multi-faceted design systems

*Program Description:*

Graphic design is one of the most ubiquitous of all art forms; quite literally, it is everywhere. From logos to branding and identity, from websites to interactive media of all forms, from marketing and promotional materials to advertising and packaging, graphic design is about visual communication. Graphic designers specialize in communicating a message to an audience on behalf of a client through a variety of media forms and outcomes. This often includes collaborating with professionals in such disciplines as Business, Communications, Marketing, Interactive/Web Design, Industrial Design, Social Sciences, Liberal Arts and others.

The Graphic Design Communication curriculum culminates with a Bachelors of Science degree. The program is conceptually based. The faculty firmly believe that a designers' highest value is to be able to generate ideas, and that a designers' intellectual property is his/her creative capital. The faculty strives to train today's designers to enter the wonderfully diverse and ever-changing profession of Graphic Design.

The Graphic Design curriculum embraces design thinking and strategic planning and views design as a powerful strategic tool to be used to help solve problems in society and business. Students will learn to understand the role that design can play in the larger context of contemporary and historical culture. The curriculum features real-world projects that are pragmatic and practical, and is based on active, hands-on learning through doing and making with critique-based feedback.

The curriculum emphasizes traditional design skills and focuses on the ability to create and develop visual and verbal responses to complex visual communication problems across a variety of media. The faculty stress the ability to articulate these responses both orally and in written form and encourage the creation of original image-making through illustrative and photographic means. The faculty also stress the importance of the narrative: illuminating information and telling stories that resonate with an audience. Graphic designers create and manage messages that tell a story.

The program emphasizes the ability to solve communication problems by exploring the design process of identifying the problem; conducting research, information gathering and analysis; the generation and iteration of alternative solutions and multiple ideas; prototyping and user testing and evaluation of outcomes.

The program stresses the ability to collaborate productively in interdisciplinary teams, and expects students to be nimble and agile learners with the ability to change and adapt with technology and to fully embrace the concept of lifelong learning.

The Graphic Design Communication program is located within the Kanbar College of Design, Engineering and Commerce (C-DEC), alongside other design disciplines such as Animation, Industrial Design, Interactive Design and Media, Textile Design and Fashion Design. Together with Business and Engineering and other disciplines across the University, there is tremendous potential for interdisciplinary collaboration.

The work produced by Graphic Design Communication students regularly wins awards and recognition in international, national and regional design competitions, exhibitions and publications, such as: the Adobe Design Achievement Awards, AIGA, Creative Quarterly Magazine, Graphis New Talent Design Annual, How Magazine Self-Promotion, Society of Publication Designers, The One Show College Design Competition and the University and College Designers Association.

## **INDUSTRIAL DESIGN**

*The checksheet for this program can be found in the checksheet section of the catalog.*

### *Mission*

The Industrial Design program delivers a broad education and the requisite professional skills, competencies and knowledge to enter into the industrial design profession. It crafts an environment that fosters critical discourse, enables personal discovery and promotes creativity and excellence. The faculty of the Industrial Design program instills in the students a responsibility towards the user, the environment and the business interests of the client. The students and the faculty seek to join the design profession in the ongoing discourse concerning the profession's role in society.

### *Program Learning Outcomes*

Graduates of the Industrial Design Program will demonstrate the ability to:

- Interpret changes in society and technology and ideas in the humanities and the arts through discussion, verbal, visual and written communication.
- Develop personal knowledge and methods needed to engage the discourse about design in different geographic and cultural contexts.
- Develop creative solutions to complex problems, relying on ideation techniques, open-ended explorations, systematic information gathering, analysis and creative resolution.
- Understand the priorities of other professions and stakeholders and collaborate with these in a productive, empathic manner.
- Seek to influence their own and other professions to adopt better practices and continually strive to improve the human condition
- Approach their work with independence, the ability to continually assess and develop their methods so they can lead efforts to achieve better results.

### *Program Description:*

The four-year Bachelor of Science in Industrial Design program equips students to create attractive, meaningful and practical products and systems that serve the needs of the end-user and supports the objectives of other stakeholders. The program prepares students to respond thoughtfully and creatively to challenges and opportunities presented by technological advances, by social development and by cultural change. The strengths of the program are derived from its interdisciplinary structure, its collaboration with industry and its engagement of the design community. Insights and unique collaborative project opportunities offer themselves to design students on a campus that hosts programs in related professions. Studio life is characterized by the simulation of work dynamics found in design consultancies and in corporate design departments.

## **INTERACTIVE DESIGN AND MEDIA**

*The checksheet for this program can be found in the checksheet section of the catalog.*

Formerly known as the Digital Design program, the Bachelor of Science in Interactive Design and Media prepares students to work in the rapidly developing field of interactive design and media.

### *Mission*

The Bachelor of Science in Interactive Design and Media prepares students to work effectively in the rapidly moving field of interactive design and media. The program provides a diverse combination of skills, including the understanding of basic design principles, the capacity to plan and develop a great strategy, the ability to harness the latest digital technologies and techniques and experience in working in a collaborative interdisciplinary environment.

### *Program Learning Outcomes:*

Graduates of the B.S. in Interactive Design and Media program will:

- Demonstrate the process involved in planning and executing an interactive visual design
- Demonstrate the use of critical thinking skills to solve complex design problems on a formal level
- Demonstrate the ability to analyze and organize information and create effective archetypes, systems and prototypes that can address complex usability, web thinking and navigational problems
- Demonstrate a broad understanding and proficiency in the role that current media, technology and development can play on solving Design problems and changing the way we use, interact and communicate
- Demonstrate collaborative learning by working in teams and on interdisciplinary design projects
- Appreciate cultural diversity and demonstrate the ability to serve society in a responsible and ethical way
- Have an understanding of the major accomplishments in the history of interactive design, including the works and intentions of leading visionaries, developers and designers in the past and present

### *Program Description:*

Digital technology has changed the way designers visualize, conceptualize and express their ideas. The curriculum in interactive design and media features a foundation based on establishing strong visual thinking and conceptual skills common to most art and design fields. In advanced courses, students develop the ability to visualize and produce work for rich information environments. They explore complex aspects of time-based, interactive design, web-based media, user experience, user interface, game design and mobile communications. Additional emphasis is placed on motion graphics, type motion and animation techniques, principles of effective story development and interactive narrative structure through rich media experiences.

A particular strength of the program lies in its collaborations with other departments and its integration with the University's courses in business, engineering and the liberal arts. Students study basic business practices and how characteristics of new technologies relate to various aspects of the networked economy. Students will have the opportunity to work in multi-disciplinary environments in teams with other majors, to understand team dynamics, leadership and to gain real-world experience.

In the first two years of study, interactive design and media students concentrate on developing basic skills necessary for visual literacy in the modern communication landscape. Basic design, expertise in typography, strategic planning, skill in electronic imaging, basic code and navigation and the principles of hierarchy in communication are all addressed.

The final four semesters include a combination of required studios designed to develop the ability to complete complex interactive projects, with consideration of social and economic factors as they apply to communication strategies. Elective courses allow study in areas of particular interest or the opportunity to explore specific digital skills or software more extensively.

Students are encouraged to participate in our internship program and to experience the richness that comes with one of our many study abroad opportunities. In the final semester, interactive design and media students are required to complete a culmination capstone course where they partner with an outside “client” to plan and produce a major project. Many of these projects have been accepted for use in actual commercial or educational enterprises.

Graduating students are required to demonstrate expertise in software manipulation and code development, an understanding of the social implications of the emerging technologies and an ability to produce aesthetically pleasing products that can inform and delight while serving the needs of a variety of commercial environments.

## **TEXTILE DESIGN**

*The checksheet for this program can be found in the checksheet section of the catalog.*

### *Mission*

The mission of the Textile Design program is to provide an integrated, collaborative curriculum that blends experiential learning in aesthetic and creative skills with emerging global technologies. The program emphasizes supportive relationships with faculty and peers, together with cross disciplinary knowledge, to turn innovative ideas into actual products – preparing students for successful careers establishing the trends in design, color and pattern.

### *Program Learning Outcomes*

Graduates of the textile design program will have the ability to:

- Apply conceptual and critical thinking skills that illustrate an understanding of the theoretical foundations of textile design
- Demonstrate skills required of the textile design industry
- Apply a base of liberal arts knowledge to examine textile design issues; through acquiring developing and conveying design ideas and information
- Demonstrate an understanding of sound textile design business practices, including ethics and law
- Develop textile design industry marketability through successful completion of the program
- Identify international perspectives to function in a global marketplace

### *Program Description*

With expanding international markets, the billion-dollar textile industry cuts across a multiplicity of products and commerce – fashion, home furnishings, medical, performance, retail and technical. This provides a world of opportunity for talented textile designers. Our program puts students on the fast track to an exciting career in this field. Textile majors range from those that are design and trend oriented, to those focused on textile science, engineering and product development – enabling specialization in the area most suited to individual interests and strengths.

Each year, Textile Design students win awards in prestigious, international design competitions sponsored by textile associations and industry corporations.

Textile designers begin their education in the studio developing a sense of color, light, shape, texture and form. They explore properties of fibers, yarns and dyes, and study the ways that fabrics are constructed. Advanced courses allow students to concentrate in a breadth of fabrication technology, including woven, knit and printed textiles.

The University invites designers, artists, industry leaders, and experts onto campus to interact with students. These weekly presentations create an opportunity for students to explore the range of career possibilities in the textile design field. Additionally, frequent field trips provide exposure to design studios, textile manufacturing facilities and product development firms.

### **JOINT B.S./M.S. TEXTILE DESIGN**

The School of Design and Engineering offers a five-year Bachelor of Science/Master of Science (B.S./M.S.) program to qualifying students majoring in textile design. Students follow the B.S. in Textile Design program for the first three years. Graduate courses taken in the fourth year of undergraduate study are applied toward both the B.S. and M.S. degrees. The fifth year includes a summer session in addition to the fall and spring semesters.

The five-year program offers an opportunity for students wishing to further their design education through a year of graduate-level work. They are given the opportunity to work on design development on a more concentrated basis, and therefore extend their design skills and portfolio work (within their chosen undergraduate specialization) to a level not attainable through the undergraduate program.

Application should be made through the Graduate Admissions Office during the junior year. Currently enrolled students will be considered for admission if they have maintained a 3.0 GPA. The GRE is required for full acceptance to the program and must be taken before the end of the senior year.

### **TEXTILE MATERIALS TECHNOLOGY**

*The checksheet for this program can be found in the checksheet section of the catalog.*

#### *Mission*

The mission of the Textile Materials Technology (TMT) curriculum is to present students with distinctive educational opportunities to demonstrate creativity and intellectual curiosity while at the same time applying time-tested principles and mixing them with a dose of cutting-edge innovation. The TMT degree develops a breadth and depth of professional skills that are infused by elements of design, engineering and commerce and are informed by the liberal arts and sciences.

#### *Program Learning Outcomes:*

The intent of the TMT program is to educate and graduate individuals who possess the technical and social competence and confidence to succeed in professional practice and advanced education. Students will be lifelong learners who will exercise responsible stewardship.

Graduates of the TMT program will be able to:

- Integrate theory and practice with research and practice, and guide creative decision-making in the textile field
- Effectively communicate to multiple audiences using oral, written, numerical and visual methods
- Establish a set of skills, competencies and attitudes that lead them to be a wise information consumers and a self-motivated lifelong learners
- Recognize the societal and environmental impact dominating sustainable practices within the textile industry
- Analyze how global, societal, political and cultural practices interact and impact the textile field
- Demonstrate experience working with and learning from others in a collaborative environment

*Program Description:*

The interdisciplinary and collaborative nature of the TMT courses creates sufficient flexibility to empower students to incorporate inventive solutions into advanced courses taken within one of five concentrations.

1. Sports and High Performance Materials involves the selection, specification and design of equipment and clothing materials for the enhancement of human performance.
2. Product Safety & Materials Evaluation is a natural out-growth of the research activities of the Institute for Textile and Apparel Product Safety (ITAPS) and the Laboratory for Engineered Human Protection (LEHP) at the Philadelphia University Research Center.
3. The Commerce concentration is designed to collaborate with the School of Business Administration. Students may select courses that focus on international marketing and management or select courses that enable a pre-MBA concentration that leads to the completion of a BS/MBA in five-years of study.
4. Textile Conservation & Forensics evolved through collaboration with the faculty in the College of Science, Health and the Liberal Arts on course development and research, e.g. forensic chemistry. Utilization of the textile and costume collection at the Design Center and the museums and conservation laboratories in and around Philadelphia will enable a new focus for research and internships using textiles and related materials.
5. Sustainability allows an in-depth analysis of textile processes that are distinct to the industry and provide students with sufficient depth of knowledge to make informed decisions about the future of textile related businesses. Students could conceivably double-major with the Environmental Sustainability major offered in the College of Science, Health and the Liberal Arts. Qualified TMT students could complete two graduate-level courses to facilitate a transition into the M.S. Sustainable Design program.

Qualified TMT students could complete two graduate-level courses to facilitate a transition into the M.S. Textile Engineering program.



## School of Design and Engineering Graduate Programs

### MASTER OF SCIENCE IN INDUSTRIAL DESIGN

Program Director: Tod Corlett

#### *Mission*

The M.S. ID program teaches the effective design of products and systems used by people. It focuses on making the relationship between people and the things they use elegant, simple, useful and beautiful, and on finding new forms of value for product users in cooperation with business and engineering, informed by user-centered research. The program is taught in an interdisciplinary studio context; it is intended for curious, motivated and highly qualified students with undergraduate degrees in design or in other fields.

#### *Program Learning Outcomes*

Graduates from the Master of Science in Industrial Design will be able to apply the following skills, knowledge and habits of critical thinking. They will effectively and specifically address the following issues in corporate, entrepreneurial or consulting contexts:

##### Aesthetics

- Analyze and respond to cultural, political, economic and cognitive issues surrounding concepts of beauty, desirability, ornament, usability and user experience in the context of designed objects and systems.
- Propose positive relationships between form and function, and be able to create appropriate aesthetic responses in diverse design situations.

##### Global Context

- Analyze and propose interventions in the global economic environment in which products and systems are designed, manufactured, marketed, sold and used in the 21st century.
- Create new understanding of how they, as designers, can participate and add value in these systems.
- Participate in international business and design cultures well enough to work effectively in a global environment.
- Exercise the cultural sensitivity and research skills necessary to design for end-user markets in global cultures.

##### Sustainability

- Respond to challenges for design implicit in rapid global change. Formulate innovative responses to issues such as climate change, pollution, resource limitations, population growth, rising standards of living in the developing world, and social and income disparities.
- Analyze the designer's role and degrees of freedom in responding to these pressing issues.

##### Research and Innovation

- Evaluate changes in social, economic and technological factors which represent potential opportunities for new product approaches, and do so in compelling and reproducible fashion.
- Analyze the lives, values and minds of product users, and be able to translate this into creation of effective design interventions.
- Plan techniques for learning about interactions between people and products, and create processes for iteratively improving the products in this experiential context.

##### Interdisciplinary Leadership

- Lead cross-disciplinary teams effectively, and take responsibility for managing the team’s work and increasing its effectiveness.
- Evaluate the nature and value of collaborative work processes, and the value added by specific disciplines.
- Analyze and synthesize responses to new challenges and opportunities facing the industrial design profession.

#### *Admissions Criteria*

A design portfolio is necessary from those with design backgrounds (this includes engineering), along with a letter of intent specifying the student’s career goals and how the student plans to contribute to the program.

Applicants must demonstrate through portfolio an ability to conceive, iterate and improve design concepts, to use sketching and computer-based tools to communicate and document these ideas, and to make well-crafted things in three dimensions. It is also expected that qualified applicants will have knowledge of human factors issues and of the history of art and design, and some familiarity working in a critique-based studio environment incorporating team project work. These abilities can be gained through academic study or through personal/professional experience.

Because of the interdisciplinary emphasis of the Industrial Design program, it is anticipated that prospective students will come from various backgrounds and levels of expertise. If an applicant is found to need development in professional skills but is otherwise qualified, the MSID program can formally prescribe additional undergraduate courses as foundational preparation. These courses may be taken before starting the MSID studio sequence or concurrently with it, at the MSID Program’s option. All applicants to the program must meet with a program representative to determine necessary foundational courses.

#### CURRICULUM SEQUENCE 42 CREDITS

(33 graduate credits minimum)

Highly qualified students may be exempted from MSID 6XX Skills and Methods, MSID 7XX Internship/Independent Study, and/or MSID 7XX Practice Tutorial, based on portfolio review. Students not exempted will take 42 graduate credits.

#### FOUNDATION COURSES, IF REQUIRED

CADF500	CAD I for Industrial Design
CADF501	Digital Design Techniques
IDF501	Design Development Drawing
IDF505	Materials/Process: Manufacturing
IDF507	Design I for Industrial Design
IDF508	Materials & Process: Fabrication
IDF509	Rendering
IDF510	Ergonomics Studies
IDF513	Design V for Industrial Design
IDF515	Design VI for Industrial Design
IDF514	Visual Studies: Drawing

YEAR I

*Summer Semester*

MSID500 Skills and Methods for ID 3

*Fall Semester*

MSID703 User-Centered Studio 6

MSID700 Research and Design Process Methods 3

*Spring Semester*

MSID705 Collaborative Studio 6

MSID707 Seminar: Current Issues in ID 3

YEAR II

*Summer Semester*

MSID791/798 MSID Internship/ Independent Study 3  
(Or Elective)

*Fall Semester*

MSID8XX Master's Project I: 6  
Implementation

MSID7XX Workshop: Prototyping 3

*Spring Semester*

MSID8XX Master's Project II: 6  
Development and Evaluation

MSID7XX Practice Tutorial 3  
(Or Elective)

TOTAL GRADUATE CREDIT HOURS: 42 credits

*Optional, not required for Graduation:*

*Winter Term*

MSID600A Graduate Intercultural Innovation: 1  
Study Abroad Component

*Spring Semester*

MSID600B Graduate Intercultural Innovation: 2  
Project Component

MSID students may take the MSID elective 600 Intercultural Innovation, or other graduate electives (Sustainable Design recommended), subject to availability and program requirements.

**MASTER OF SCIENCE IN INTERACTIVE DESIGN AND MEDIA**

Program Coordinator: Sherman Finch

*Mission*

The mission of the M.S. in Interactive Design and Media is to prepare students to be professionals who will change standards by which society communicates and interacts. When one looks at websites,

mobile communications devices, graphic user interfaces, or integrated systems, one sees the importance of interaction in communicating a rich media experience. For businesses, success depends on a well-designed, engaging, dynamic and robust user experience. The M.S. in Interactive Design and Media program provides students the necessary skill sets and promotes the critical thinking that is vital to this evolving field.

The predominant feature of the M.S. in Interactive Design and Media program is the development of new and innovative ways of communicating and learning to work as a team. The program offers students a unique opportunity to study in an interdisciplinary atmosphere. While learning to be a successful member of an interdisciplinary design team, students acquire skills to manipulate digital technology, communicate ideas, visualize design proposals and manage information.

### *Program Learning Outcomes*

Graduates of the M.S. in Interactive Design and Media will:

#### Best Practices in Visual Communication, Information Literacy

- Use principles of design, such as visual organization, information hierarchy, typography, narrative and aesthetics to solve problems.
- Plan and design usable sites by collecting data through various methods.
- Analyze and evaluate data, plan and execute intuitive interfaces, user experiences and rich interactive designs.

#### Practical Interactive Knowledge and Technological Skills

- Use equipment, technology and resources that represent current trends in the field.
- Analyze and design functional prototypes.
- Apply user experience design principles.
- Evaluate and respond to user needs and develop solutions to usability problems.
- Apply fundamental concepts of internet and digital marketing including social media, and email marketing.
- Create and analyze system architecture such as Content Management Systems, web development, user interactions and database development.

#### Development, Production and Post Production Knowledge

- Use computer languages, compilers, interpreters and assembler products to produce code and output to meet specifications.
- Illustrate an understanding of digital technologies in the creation, production and use of visual communication.
- Utilize and synthesize digital tools including software, photography, time-based and interactive media to create effective visual designs.

The M.S. in Interactive Design and Media program emphasizes the following:

- Skills in planning, organizing and executing an interactive visual design.
- Critical thinking skills and problem solving for complex interactive design projects on both a formal and conceptual level.
- Competence in digital technologies, analytics, information design, strategy and methods of usability.
- The importance of collaborative and interdisciplinary work, fundamental to the success of graduates in the digital design field.

- A strong understanding of and appreciation for cultural diversity and the ability to serve society in a responsible and ethical way.
- The major accomplishments in the history of interactive design, including the works and intentions of leading visionaries, developers and designers in the past and present.

The M.S. in Interactive Design and Media program concludes with a final capstone research project. In this synthesis studio, students will develop a final, working prototype of a product, service, entertainment or publication of their choice that synthesizes all of their knowledge and skill from the previous semesters. The final project demonstrates marketability and/or successful functionality within the larger community. This project prepares the student to enter the rapidly expanding field of interactive design by closely emulating the professional interactive design environment. It prepares the student to enter a profession that requires innovative designers with the ability to work within a collaborative interdisciplinary team.

#### *Admissions Criteria*

##### **M.S. in Interactive Design and Media 2-Year Program**

An undergraduate degree in design is highly recommended for this 2-year program.

Applicants must demonstrate a high degree of technical proficiency in interactive design as well as an ability to conceptualize and produce at a sophisticated level of communication. The background for this skill set could come from significant professional experience and/or previous study. An online interactive design portfolio is necessary, two letters of recommendation, transcripts, a resume, along with a letter of intent, specifying the student's goals for the period of study.

##### **M.S. in Interactive Design and Media 3-Year Program**

Applicants must demonstrate an understanding of and aptitude for design or the visual arts, either through professional experience and/or previous study. A portfolio demonstrating the candidate's creativity is required. This portfolio can be in the form of a CD and does not have to be online. Also required are two letters of recommendation, transcripts a resume along with a letter of intent specifying the student's goals for the period of study. The initial courses in this track provide an appropriate foundation for students who have a background in the visual disciplines but need additional design or interactive experience before they start two years of immersive graduate coursework. In some cases students from other disciplines who demonstrate a particular aptitude for design may be accepted into the program.

#### *Curriculum Sequence*

Because of the interdisciplinary emphasis of the Interactive Design and Media program, it is anticipated that prospective students will come from various backgrounds and levels of expertise. Both programs are designed to accommodate these different backgrounds by offering two distinct curricular sequences.

The 2-year program is open to students who already possess an undergraduate degree or professional experience in design. They must demonstrate a high level of technical and conceptual competency in a core group of technological abilities including skills in web design, video production and rich media.

The 3-year program is open to students who possess an undergraduate degree in a field other than design, or have professional experience. They must demonstrate a mid-level of technical and conceptual competency in a core group of technological abilities. This type of student will benefit from an additional year of interactive foundations, where they will acquire the necessary technical and design skills and critical thinking abilities needed to perform in the 2-year program.

## 2-YEAR PROGRAM

(36 graduate credits)

### YEAR I

#### *Fall Semester*

IDD621	Digital Experience Design	6
IDD623	Theory of Electronic Communication II (graduate seminar)	3

#### *Spring Semester*

IDD631	Digital Innovation Design	6
IDD632	Database Management and Scripting	3

### YEAR II

#### *Fall Semester*

IDD635	Interactive Narrative/Drama	3
IDD941	Interactive Design Synthesis Project Preparation	3
	Free Elective	3

#### *Spring Semester*

IDD942	Interactive Design Synthesis Project Free Elective	6 3
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TOTAL CREDIT HOURS: 36 Credits

## 3-YEAR PROGRAM

(18 foundation credits and 36 graduate credits)

This program is open to students with a bachelor's degree. Typically, this degree will be in a visually-based discipline, although in some cases students from other disciplines who demonstrate a particular aptitude for design could also be accepted in the program. Students in the 3-year program will be required to take 18 credits of foundation courses in their first year. After a summer break, they will begin master's-level coursework.

### YEAR I

#### *Fall Semester*

##### Foundation Courses

IDF502	Electronic Imaging	3
IDF511	Interactive Design III (undergraduate-level studio)	6

#### *Spring Semester*

##### Foundation Courses

IDF512	Interactive Design IV (undergraduate-level studio)	6
	Free Elective	3

FOUNDATION CREDIT HOURS: 18 Credits

### YEAR II

*Fall Semester*

IDD621	Digital Experience Design	6
IDD623	Theory of Electronic Communication II (graduate seminar)	3

*Spring Semester*

IDD631	Digital Innovation Design	6
IDD632	Database Management and Scripting	3

YEAR III

*Fall Semester*

IDD635	Interactive Narrative/Drama	3
IDD941	Interactive Design Synthesis Project Preparation	3

Free Elective 3

*Spring Semester*

IDD942	Interactive Design Synthesis Project	6
	Free Elective	3

GRADUATE CREDIT HOURS: 36 credits

TOTAL CREDIT HOURS: 54 credits

## **Master of Science Programs in Textiles**

The M.S. in Textiles programs are intended to develop the student's analytical, creative and problem solving skills appropriate to a professional person seeking a senior position in the textile or related industries.

Through common core courses, the M.S. in Textiles programs bring together graduate students with differing professional goals and interests within the textile field.

In the planning of the programs, careful attention has been given to ensure that: (1) there is balance between theory and practice; (2) the student is able to develop research skills and capabilities; and (3) the student has a culminating capstone experience during the final semester, through the completion of a technical research project, a scholarly thesis, a marketing project or a design collection.

The course credits are spread over three stages. In the case of full-time students, this would equate to three to four semesters, assuming that no foundation courses are required. The availability and rotation of courses at each stage of the program for part-time students is monitored to ensure that students follow the courses in the correct sequence.

The curriculum includes foundation courses and core courses, as well as elective courses. The elective courses are chosen in consultation with the student's academic advisor.

### *Foundation Course Requirements*

The foundation course requirements will vary according to the applicant's completed undergraduate major, as well as the selected textile specialization.

Applicants will be advised on an individual basis by the graduate program director concerning prerequisites and the required foundation courses, or equivalent undergraduate courses which need to be taken, or possible exemptions where appropriate.

## **MASTER OF SCIENCE IN TEXTILE DESIGN**

Program Director: Claire Beevers

### *Mission*

The Master of Science in Textile Design provides both integration and balance between creative design and technology, to prepare students for successful careers within the US textile design industry. The program opens up the opportunity for successful and creative professional development for students who hold previous studio arts degrees, plus those coming from alternative backgrounds.

The program structure has a unique balance of a strong technology base across all aspects of textiles, upon which students build their design skills in a single concentration of knit, weave or print. Collaborative experiences with other majors, plus a range of additional projects assigned by industry professionals and companies, serve to expand the students' experiences.

### *Program Learning Outcomes*

Through the course of the program, students will:

- Develop an appreciation of the multi-faceted nature of textile design and the technical knowledge, skills, design and development processes and business structures required for a professional career in textiles.
- Practice sustained visual research through original visual observation and trend information.
- Apply visual research and technical skills into a collection of knitted, woven or printed textiles.
- Produce a final body of textile design work, a fabric collection for exhibition and portfolio, exhibiting individual concept and development.
- Produce an account of their final semester collection in thesis format for inclusion in the Gutman Library collection.

### *Foundation Courses Specific to the M.S. in Textile Design*

The following foundation or equivalent undergraduate courses may need to be completed. The specific foundation course requirements for each student will be based upon consultation with the area concentration advisor. Contact the School of Design and Engineering for further information.

ARTH102	History of Western Art II or TXF 503 History of Textiles & Costumes
CHEM101	General Chemistry
DRAW101	Drawing I
TXF501	Foundation Fiber and Yarn Studies
TXF506	Design Foundations II
TXF507	Design Foundations III
TXF510	Introduction to Textile Computer-Aided Design
TXF511	Knitting I
TXF516	Dyeing and Finishing
TXF517	Weaving I



Depending upon concentration:

TXF512 Knit Design Studio I and TXF513 Knit Design Studio II or  
TXF514 Print Design Studio I and TXF515 Print Design Studio II or  
TXF518 Weave Design Studio I and TXF519 Weave Design Studio II

\* The foundation requirement in Textile Design Studio may be waived via portfolio review only.

#### CORE COURSES: 36 CREDITS

TXD615 Design Studio IA (three credits)\*  
TXD616/TXD617 Design Studio IB & IC (six credits total)\*  
TXD625 Seminar (credit/no credit)  
TXD 665 Design Management  
TXD742/TXD743/TXD744 Design Studio II (nine credits total)\*  
TXD749 Weaving Technology or  
TXD750 Knitting Technology or  
TXD776 Textile Printing Technology  
TXD772/TXD773/TXD774 Design Studio III (eight credits total)\*  
TXD777 Advanced Computer-Aided Design  
TXD975 Thesis (one credit)

\* Design Studio 26 credits

The Design Studio courses make up the majority of the coursework in the M.S. in Textile Design program. Students are required to specialize in one design area (knit, weave or print), but are encouraged to incorporate the other areas of textile design through their foundation courses, elective or design studio work. The 26 credits of Design Studio are split into three stages that may be spread over three semesters. However, the student may elect or be advised to take only three or six credits of Studio in any semester depending on individual progress, development and available time commitment. All students involved in Textile Design Studio courses will participate in common presentation/critique sessions toward the end of the semester.

Students may elect to replace up to six credits of Design Studio with graduate-level electives. The selection of these electives should be approved by the primary design faculty member and the program director.

#### ELECTIVES: 3 CREDITS

Choose one course from the following or other courses approved by the program director.

TXD756 Advanced Jacquard  
TXD780 Advanced Drawing: Materials & Techniques  
TXD791 Internship  
TXD798 Independent Study  
TXD993 European Textile Print Study Tour (Alternate Years)  
TXD994 European Knitting Study Tour  
TXE751 Advanced Woven Structures - Product Development  
TXE752 Advanced Knitted Structures - Product Development

TOTAL CREDIT HOURS: 39 Credits

*Additional Requirements for Textile Design Applicants*

Applicants are required to provide the Admissions Committee a typed personal statement (250-500 words) discussing (1) the applicant's reasons to pursue a graduate degree in textile design and (2) why the applicant believes he/she will be successful with this course of study.

## **MASTER OF SCIENCE IN TEXTILE ENGINEERING**

Program Director: Brian George, Ph.D.

### *Mission*

This program is intended to develop the graduate student's knowledge in the advanced fields of textile science and engineering. Students with undergraduate education in the fields of textile engineering, textile chemistry and textile sciences, and those with undergraduate experience in engineering or materials technology are welcome to pursue this program. The wide range of textile engineering courses will prepare the student to make significant contributions in either advanced textile manufacturing technology or textiles material science. The carefully integrated educational offerings at the University enable the student to be exposed to a wide range of professional education possibilities. A capstone experience is provided during the final semester.

### *Program Learning Outcomes*

Graduates of the M.S. in Textile Engineering will:

- Demonstrate knowledge & proficiency in technical aspects of textile engineering
- Analyze and criticize established textile theories and synthesize new theories
- Understand and evaluate engineering theory
- Apply their acquired skills toward the development of a unique research project
- Demonstrate a competent knowledge and proficiency in the field of textile engineering
- Perform written and oral technical communications at a competent level.

### *Foundation Courses*

The foundation courses, will be determined at the time of admission by the program director.

COURSES: 27 Credits

Students choose nine courses from the selection below, after consultation with their graduate advisor.

TXE601	Fiber and Yarn Studies
TXE613	Characterization of Fibrous Materials
TXE621	Mechanics of Materials
TXE622	Mechanics of Textiles
TXE624	Advanced Textile Composites
TXE625	Biomaterials Technology
TXE713	Coloration and Finishing Studies
TXE721	Analytical Methods
TXE751	Advanced Woven Structures
TXE752	Advanced Knitted Structures
TXE753	Advanced Nonwoven Structures
TXE754	Industrial and Specialty Fabrics
TXE755	Advanced Yarn Studies
TXE759	Product Evaluation
TXE762	Textile and Apparel Operations Management

TXE783           Advanced Chemistry of Fibrous Materials  
TXE790           Quality Management  
TXE791           Internship  
TXE797           Selected Topics  
TXE798           Independent Study  
THESIS: 9 Credits  
TXE941           Research Thesis  
TOTAL CREDIT HOURS: 36 Credits

## **DOCTOR OF PHILOSOPHY IN TEXTILE ENGINEERING AND SCIENCE**

Program Director: Brian George, Ph.D.

### *Mission*

The mission of the Textile Engineering and Science Doctor of Philosophy program is to educate textile engineers who combine theory, practice, scholarly research and application of knowledge in their chosen professions. It is expected that graduates of the doctoral program will pursue careers in basic and applied research in industry, government or university settings. Graduates will contribute original research and scholarly publications to the fiber and textile fields.

### *Program Learning Outcomes*

Graduates of the Ph.D. in Textile Engineering will:

- Demonstrate knowledge of and proficiency in applying research methodology to textile engineering
- Demonstrate knowledge and proficiency in technical aspects of textile engineering
- Analyze and critique established textile and engineering theories and synthesize new theories based on research
- Apply their acquired skills toward the development of a unique research project
- Perform written and oral technical communications at a competent level

### *Program Description*

The doctoral program in Textile Engineering and Science emphasizes not only depth in fundamental textile engineering and science/mechanical engineering disciplines, but also an interdisciplinary approach to understanding technologies in which textile engineers and scientists can and should take a leading role. It is this combined emphasis on fundamentals, the ability to think and work outside one's area of expertise and the ability to frame complex problems, that best defines this doctoral program. Students will propose a textile engineering and science problem of substance and will then develop a solution. Students must demonstrate the ability to apply scientific principles to meet engineering needs with due regard to social and economic factors, and within a reasonable time constraint.

### *Program Structure*

Doctoral candidates will have as their primary goal the completion of an original engineering/scientific contribution to the body of knowledge in the field of textiles. This contribution will be in the form of a written doctoral dissertation that will be defended in the presence of the faculty of Philadelphia University.

During the first year of the program, students will complete required coursework, including a 9-credit-hour (three courses) engineering minor. In a collaborative agreement with nearby Temple University, these graduate-level courses will be taken at the College of Engineering at Temple. The student's doctoral committee may require additional courses to enhance the student's research. All courses will be taken in the first year of the doctoral program. Students will then be required to pass a two-part qualifying examination in the field of textile engineering. The first part is a written examination, and the second part is an oral examination. A major and a minor topic will be chosen by the candidate and the doctoral committee and agreed upon at least four months in advance of the examination. Dates for the written and oral exams will be selected by mutual agreement of the candidate and the committee members.

All members of the committee should be present for the oral examination. The written examination may be administered by the committee chair with input from other committee members. The result of the two-part qualifying examination will be a pass or a fail. Both the written and oral examinations should be completed by the end of the second semester of study. Upon the successful completion of the examination, students will be formally admitted to doctoral candidacy. This will usually occur after the first year of full-time enrollment.

Students who fail the qualifying examination on the first attempt will be given one more chance, at the discretion of the committee, to improve their performance. In any case, the qualifying examination must be completed before the end of the second year of the student's doctoral program.

The candidate will then make a formal Ph.D. thesis proposal defense. Once approved by the doctoral committee, students will conduct their doctoral research and subsequent dissertation. At the completion of a written dissertation, the candidate will give a formal and public thesis defense. Upon a successful defense the student's candidacy will be completed, and upon the recommendation of the faculty of the Philadelphia University the candidate will be awarded the Ph.D. in the field of Textile Engineering and Science.

### *Degree Requirements*

#### FIRST YEAR: 18 CREDITS

Selection of doctoral advisor

Completion of doctoral committee selection

Three engineering courses at Temple University 9

TES901 Preliminary Examination Preparation 3

TES902 Thesis I 6

Successful completion of doctoral qualifying examination

#### SECOND YEAR: 18 CREDITS

Doctoral thesis proposal defense

TES903 Dissertation Research I 9

TES904 Dissertation Research II 3

TES906 Thesis II 6

Defense of Doctoral Dissertation

Credit for previous master's degree: 36 credits (minimum)

TOTAL CREDIT HOURS 72 Credits

While it is the intention to have students study full-time, there will be a provision for students to take a leave based on personal reasons. In all cases, students will have a maximum period of five years from the date of initial enrollment to complete all doctoral degree requirements. The minimum time requirement to complete the doctoral program is two years. The minimum full-time enrollment in residence is two semesters.

#### *Admission to the Ph.D. Program*

The Ph.D. program in Textile Engineering and Science is primarily an advanced research-oriented program that will be offered to selected graduates of M.S. Textile Engineering programs. Students from M.S. Textile Engineering programs that are offered internationally also will be considered for admission. Candidates with advanced engineering degrees in fields other than textiles, e.g., mechanical, chemical or materials, may be considered for admission if they agree to take master's-level textile engineering courses at Philadelphia University. The credits they receive for these additional courses will not take the place of the required nine credits of minor courses in engineering, and they will serve as foundation-level courses.

#### *Standardized Test Requirements*

Applicants to the Ph.D. program who have master's degrees in textile engineering (or other acceptable fields as noted above) from a university in the United States are not required to submit GRE or TOEFL scores for admission. For all other students (international students and those who do not have an acceptable master's qualification) the requirements for the admission to the M.S. in Textile Engineering program will apply.

#### *Graduate Research Assistantships*

All students admitted to the Ph.D. program in Textile Engineering and Science will be offered research assistantships funded through external grants and contracts. The selection of students is based on the suitability of students' backgrounds and their interests in fields that match those of the funding professor. For application and assistantship availability, please contact the Graduate Admissions Office.

# College of Science, Health and the Liberal Arts

**Executive Dean:** M. Baker

**Academic Associate Dean:** B. Kimmelman

**Academic Associate Dean, College Studies:** T. Schrand

**Coordinator of Academic Operations:** P. Brennan

**Faculty:** J. Ashley, A. Baker, M. Baker, J. Bail, C. Bock, A. Bower, P. Bradford, L. Carey, J. Coale, D. Cundell, K. Dawley, M. McCoy Deh, S. Dinero, E. Dowden, J. Emery, A. Fairman, C. Farley, K. Gindlesparger, E. Goldman, S. Haiman, V. Hanson, S. Humbert, K. Jones, B. Kimmelman, E. Knapp, W. Krupnick, M. Kurilko, E. Laine, M. Liff, R. Mbatu, A. Melinn, D. Michaels, M. Milkevitch, S. Parillo, C. Pastore, D. Perlman, D. Pfeuffer-Scherer, R. Parakkal, C. Pierce, J. Pierce, M. Rackover, A. Richman, H. Rostami, M. Roydhouse, T. Schrand, R. Shain, G. Smith, P. Tiemeyer, M. Tulante, K. Turner, S. Van Dahm, J. Ward, W. Wachter-Schutz, F. Wilkinson, R. Wilson, H. Woodcock

The College of Science, Health and the Liberal Arts is home to a multi-disciplinary faculty and innovative curriculum in history, the humanities, mathematics, the sciences, the social sciences and the health professions. The College has a mission to promote academic excellence in professional education and the liberal arts and sciences through its academic programs and offerings that include:

## College Studies Program

The College of Science, Health and the Liberal Arts is responsible for the delivery of Philadelphia University's innovative general education core curriculum that stresses active learning, integrative thinking and a blending of professional and liberal education. This curriculum encourages students to approach their professional area within the broader political, social, economic, ethical and cultural context. It promotes critical thinking and enhances the student's skills in communication, quantitative reasoning, information literacy and research.

## Undergraduate Programs

Environmental Sustainability

Law and Society

Professional Communication

Biochemistry

Biology

Biopsychology

Chemistry

Environmental and Conservation Biology

Health Sciences

Pre-Medical Studies

Psychology

## Combined Degrees

B.S. in Health Sciences/M.S. in Physician Assistant Studies

Option: Five-Year Freshman Admission B.S. /M.S.

B.S. in Health Sciences/M.S. in Occupational Therapy

B.S. in Psychology/M.S. in Occupational Therapy

MBA/M.S. in Physician Assistant Studies

Option: Three-Year M.S./MBA

### **Graduate Programs**

Master of Science in Disaster Medicine and Management

Master of Science in Midwifery

Master of Science in Midwifery Completion Program

Master of Science in Occupational Therapy

Master of Science in Physician Assistant Studies

### **Graduate Certificate Programs**

Disaster Medicine and Management

Business and Organizational Continuity

Post Master's Certificate in Nurse-Midwifery

### **Science, Health and the Liberal Arts Minors**

For more information about the minors see "Minors and Concentration" section of the Academic Catalog.

- Biodiversity
- Environmental Sustainability
- Law and Society
- Professional Communication
- Psychology
- Public Health
- Social Sciences

Support to the other Colleges, such as providing the mathematics and physics instruction to the engineering programs.

### **College Mission**

The College of Science, Health and the Liberal Arts strives to graduate students who are competent professionals and who are fully prepared for professional practice or graduate study and are proficient in the general areas of:

- Information literacy and lifelong learning
- Oral, written and electronic communication
- Quantitative reasoning
- The use of technology
- Critical thinking, in-depth analysis, complex decision-making and problem solving
- Appreciation for diversity and awareness of a global perspective
- Ethical reflection
- Civic engagement
- Leadership

The College seeks to create and foster a learning community of self-motivated students and teacher-scholars with meaningful interactions both in and out of the classroom and laboratory.

## **Core Values**

This mission will be accomplished through the focus and dedication of a premier faculty, administration and staff in a nurturing environment based on the following common set of values:

- Innovative teaching and active learning
- Individual mentoring and outstanding academic advising
- Outstanding service to students, families and alumni
- Strong professional preparation grounded in the liberal arts and sciences
- Applied research with student participation
- Ethical reflection and integrity
- Program, college, university and community service

## **COLLEGE STUDIES PROGRAM**

### **Mission**

The College Studies program — Philadelphia University's general education core curriculum — promotes a strong liberal arts and sciences education alongside the University's professionally oriented majors. Students progress through a sequence of foundational courses, making connections between disciplines and viewing their own fields of choice through wider social, economic, political and cultural lenses. The liberal arts and sciences form the foundation of every student's major, bringing classmates together to share a common educational experience and to learn from each other's diverse perspectives.

Two realities fuel our College Studies program: the inevitability of future change — in the economy, technology, the workplace or career goals — and the necessity for effective communication, critical thinking, research and information literacy skills. The College Studies program at the University promotes the development of lifelong skills through a structured and progressive approach to the liberal arts and sciences that prepares students for a constantly changing world in which career success requires more than just the latest technical skills. As a program, College Studies comprises about 40 percent of students' baccalaureate experience and represents the most significant common factor in their education. Offering core courses and options within categories, the program is sequenced over four years to meet the intellectual needs of students at each level of development.

### **Program Learning Outcomes**

Through the College Studies general education program, graduates of the B.S. programs at Philadelphia University will:

- Understand the cultural, political and economic development of the United States and the challenges of citizenship in a diverse, pluralist society and in the global community.
- Understand the interdependence of the world, including its history, societies, cultures and environments.
- Connect learning across disciplines and between liberal education and professional studies as a means of making effective contributions to their professions and their communities.
- Develop effective critical thinking, written and other forms of communication, quantitative, research and information literacy skills.
- Engage in ethical and moral reasoning in their personal and professional lives.
- Develop the cross-cultural understanding and communication skills necessary to live and work in a multi-cultural society and in an interconnected world.



- Understand the methodologies and concepts central to the humanities, social sciences and natural and physical sciences to enrich their understanding and aesthetic appreciation of the world.
- Become successful collaborative, reflective, intentional and lifelong learners.

### Program Description

College Studies courses introduce students to the major modes of knowledge, such as the nature of the scientific method and the methods of analysis used by social sciences. They also seek to develop awareness of the connections among academic disciplines. In the first year of study, the primary focus is upon the American experience. Students examine the implications of a multi-cultural society and its impact on the workplace in the United States, as well as abroad. Courses throughout the remaining years of the program expand students' understanding of the wider international context. Students may take foreign language courses, as well as regional/area studies courses to promote an understanding of the increasingly interdependent world.

To promote effective communication skills, the College Studies program has a strong emphasis on writing, with two courses devoted specifically to writing, and other courses in which writing is an important element, including at least one writing-intensive course in every major.

This innovative program is customized to the University's mission of professional education and its use of best practices in general education has been recognized by grants from the National Endowment for the Humanities, the Fund for the Improvement of Post-Secondary Education, the Association of American Colleges and Universities and the Carnegie Foundation for the Advancement of Teaching.

### Sequencing of College Studies Courses

#### College Studies: The general education core curriculum at Philadelphia University

**Select appropriate number of courses from each block.**

*Revised April 2012*

Year 1 (1-30 credits) 100's	Year 2 (31-60 credits) 200's	Year 3 (61 to 90 credits) 300's	Year 4 (90-120+ credits) 400's
(Language courses can be taken in any year)	<b>Language or Area Studies</b> Select <u>two</u> courses: (6 cr.)  Arabic I-II ARAB-XXX Chinese I-II CHIN-XXX Japanese I-IV JAPN-XXX Spanish I-IV SPAN-XXX French I-IV FREN -XXX German I-II GER-XXX Italian I-III ITAL-XXX	PREREQ for AREAST: WRTG-101, HIST-114  AREAST-201: Europe AREAST-202: Latin America AREAST-205: East Asia AREAST-208: Africa AREAST-210: Middle East AREAST-220: Great Britain (Study Abroad Preparation) AREAST-226: Italy (Study Abroad Preparation) AREAST-227: India and South Asia	<b>Senior Capstone Course</b> (Writing Intensive) PREREQ: HUMN-1xx, one Junior Seminar, one Language/Area Studies  One course for all students (4 cr.)  COLLST-499: Contemporary Perspectives
<b>Science I and II</b> Select <u>two</u> courses: (6-8 cr.)  Check requirements for major <b>Non-science majors</b> SCI-101: Environmental Science SCI-102: Exploring Science	<b>Science majors</b> CHEM-103: Chemistry I (4 cr.) BIOL-103: Biology I (4 cr.) PHYS-201: Physics I (4 cr.)	<b>Junior Seminars</b> (Writing Intensive) PREREQ: WRTG-2xx, SOC-2xx Select <u>two</u> courses: one from each category below or two Liberal Arts Seminars (6 cr.)	

<p>SCI-108: Sustainability and Eco-Innovation          SCI-112: Materials Selection          BIOL-101: Current Topics in Biology          CHEM-101: General Chemistry          PHYS-101: Gen. Physics          BIOL-106: Biology for Design</p>		<p><b>Liberal Arts Seminars</b></p> <p>JSLA-360: Creative Writing          JSLA-361: From Fiction to Film          JSLA-362: The Artist &amp; Society in Literature and Film          JSLA-363: Shakespeare and Contemporary Culture          JSLA-370: The U.S.: The Recent Past          JSLA-380: Human Rights          JSLA-381: Gender Studies          JSLA-390: The Urban Experience          JSLA-391: The African-American Experience</p> <p>(Go to <a href="http://www.PhilaU.edu/JuniorSeminars">www.PhilaU.edu/JuniorSeminars</a> to check for additional offerings in this category)</p>
<p><b>Quantitative Reasoning I and II</b>          Select one of the sequences below_(depending on major and placement): (6-8 cr.)</p> <p>MATH-100/1: Finite Math          MATH-103: Introduction to Calculus  <b>or</b>          MATH-102: Pre-Calculus          MATH-103: Introduction to Calculus  <b>or</b>          MATH-102: Pre-Calculus &amp; MATH-111: Calculus I  <b>or</b>          MATH-103: Introduction to Calculus and one Free Elective  <b>or</b>          MATH-111: Calculus I and one Free Elective</p>	<p><b>Social Sciences I</b>          PREREQ: WRTG-101, HIST-114          Select <u>one</u> course: (3 cr.)</p> <p>SOC-201: Class, Gender &amp; Race in World Societies          SOC-204: Personality &amp; Global Cultures          SOC-208: Individual &amp; The Global Environment          SOC-211: Power and Poverty in the Global Economy          SOC-225: Global Politics</p>	<p><b>Integrative Professional Seminars</b></p> <p>JSINT-384: Applied Professional Ethics</p> <p>(Go to <a href="http://www.PhilaU.edu/JuniorSeminars">www.PhilaU.edu/JuniorSeminars</a> to check for offerings in this category)</p>
<p><b>Writing Seminar I</b>          One course for all students (3 cr.)</p> <p>WRTG-101: Writing Seminar I: Finding Philadelphia</p>	<p><b>Writing Seminar II</b>          PREREQ: WRTG-101, HIST-114          Select <u>one</u> course: (3 cr.)</p> <p>WRTG-211: Business          WRTG-215: Design          WRTG-217: Science, Engineering, Technology, and Health Professions</p>	
<p><b>Historical Understanding</b>          One course for all students: (3 cr.)</p> <p>HIST-114: American Transitions</p>	<p><b>Humanities I</b>          PREREQ: WRTG-101, HIST-114          Select <u>one</u> course: (3 cr.)</p> <p>HUMN-215: Evil and Good          HUMN-223: World Philosophies          LIT-225: Exploring World Literature</p>	

<b>Arts &amp; Cultures (Non-Design Majors)</b> Select <u>one</u> course: (3 cr.)  ARTS-101: Integrative Design Process ARTS-120: Performing Arts ARTS-123: Ideas and Images (not for programs in the College of Architecture and Built Environment or <u>any</u> Design major) ARTS-105: Music ARTH-101: History of Western Art I ARTH-102: History of Western Art II AHIST-205: History of Architecture & Interiors I ARCH-204: Great Buildings (not for Arch, L/Arch, ID or EDVS)		<b>Arts &amp; Cultures (Design Majors)</b> Select <u>one</u> course: (3 cr.)  <b>Textile and Fashion Design Majors</b> ARTH-101: History of Western Art I <b>Architecture Majors</b> AHIST-205: History of Architecture <b>All Other Design Majors</b> Select <u>one</u> course: (3 cr.) ARTH-101: History of Western Art I ARTH 102: History of Western Art II ARCH-204: Great Buildings (not for Arch, L/Arch, ID or EDVS)	
Total: 15-22 credits	Total 12-13 credits	Total 12 credits	Total: 4 credits

College Studies courses are sequenced over four years in order to meet the intellectual needs of students at each level of their education. In most cases, each category of courses will be taken at a specific time in the student’s major program. Students should consult with their academic advisors before registering each semester, and use the chart below to follow the sequencing of the College Studies program.

### Fundamentals Courses

Some students begin the College Studies sequence with appropriate preparatory courses in reading, writing and mathematics (determined by placement testing). Introduction to Academic Writing (WRTG-100), Fundamentals of College Reading and Study Skills (READ-099) and Fundamentals of College Mathematics (MATH-099) are listed in the course-description section.

### Description of College Studies Groups and Courses

The following provides a description of the categories or groups of courses, which are taken in a prescribed sequence in the College Studies program. The groups and courses are listed in the sequence in which students will take them.

#### Writing Group: Writing Seminar I (WRTG-101) and Writing Seminar II (WRTG-21X)

The College Studies program includes two courses in which writing is a central focus. Students take the first course in the freshman year and the second in the sophomore year. Some students may begin the sequence with Introduction to Academic Writing (WRTG-100) (determined by placement testing).

#### WRTG-100 Introduction to Academic Writing

This is a theme-based writing course designed for students who need additional preparation before taking Writing I. Students who place into this course are given background information about the content of Writing I, which prepares them to read and write college-level academic prose. Students for whom English is a second language take an ESL version of this course, though students should only be placed in WRTG-100ESL after designated faculty members have evaluated a writing sample.

#### Writing Seminar I

The first of two core writing-specific courses in the College Studies Program, WRTG-101 Writing Seminar I: Finding Philadelphia is a theme-based writing course designed to be taken in the first year of study. The interconnected skills of careful reading, critical thinking and cogent writing are the primary concerns of this course. The seminar has a specific topic, focused on aspects of diversity in the Philadelphia cultural experience. Through reading, discussing and writing about a variety of texts that share a common theme, students learn the rudiments of writing college-level academic papers. Honors and English as a Second Language versions of this course are available.

## Writing Seminar II

All versions of this sophomore level writing course focus on problem solving and thinking analytically about professional concerns. Students address key issues in different disciplines and professions. Students select one course from the following:

WRTG-211	Writing Seminar II: Business
WRTG-215	Writing Seminar II: Architecture and Design
WRTG-217	Writing Seminar II: Science, Technology, Engineering and Health Professions

## Scientific Understanding

All students will complete two science courses in order to understand the scientific method and its application. Some students will take one science course in their first year and a second the following year, while others will take both College Studies science courses in the first year. Students should take the sequence that meets the requirements of their major and is of greatest interest.

SCI-101	Environmental Science
SCI-102	Exploring Science
SCI-106	Biology for Design: From Biological Adaption to Biomimetic Design
SCI-108	Sustainability & Eco-Innovation
SCI-112	Materials Selection
BIOL-101	Current Topics in Biology
CHEM-101	General Chemistry
PHYS-101	General Physics
CHEM-103/103L	Chemistry I/Chemistry I Lab
CHEM-104/104L	Chemistry II/Chemistry II Lab
BIOL-103/103L	Biology I/Biology I Lab
PHYS 201/201L	Physics I/Physics I Lab

## Quantitative Reasoning

The College Studies curriculum requires every Philadelphia University graduate to complete a mathematics education that includes differential and integral calculus, to ensure that our graduates have developed quantitative reasoning skills that strengthen their critical thinking abilities. To fulfill this core curriculum requirement, students must complete the highest calculus course for which they are qualified, up to Calculus I.

### *Quantitative Reasoning I*

MATH-100/101	Finite Mathematics
MATH-102	Pre-Calculus
MATH-102	Pre-Calculus
MATH-111	Calculus I
MATH-103	Introduction to Calculus

### *Quantitative Reasoning II*

MATH-103	Introduction to Calculus
MATH-103	Introduction to Calculus
MATH-111	Calculus I
MATH-112	Calculus II
	Free Elective

### **Arts and Cultures - one course**

Courses in this group are divided between those dealing with visual literacy and those that help students “read” the performing arts or explore the notion of aesthetic knowledge itself.

ARTS-101	Integrative Design Process
ARTS-105	Music
ARTS-120	Performing Arts
ARTS-123	Ideas and Images (not for Architecture or any design majors)
ARTH-101	History of Western Art I
ARTH-102	History of Western Art II
AHIST-205	History of Architecture & Interiors I

### **Historical Understanding I - one course**

The course in this category helps students understand the significance of change over time and the way in which our present is shaped by the past. American Transitions focuses on the various transformations of U.S. society since the end of the Civil War, with a special emphasis on Philadelphia as an example of America’s historical development.

HIST-114	American Transitions
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### **World Languages and Area Studies - two courses**

The offerings for this group seek to promote students' intercultural and international understanding. A student receives College Studies credit for only two offerings within this distribution group (there is an exception for Engineering students, who need only one course in this category). Students may choose World Language courses, or study a region and understand its cultures in the Area Studies courses. Students planning to study abroad should consult early with their advisors about how best to prepare in terms of the courses in this category.

*Students may take:*

- Two courses in Area Studies; or
- One World Languages course and one course in Area Studies; or
- Two courses in the same World Language.

### **World Languages:**

Students taking two World Languages courses to fulfill this requirement must take sequenced levels of the same language to satisfy the World Languages requirement; for example, a student cannot take Spanish I and French I

An exception to the sequencing rule can be given if:

- a student places into a higher-level language course (e.g. German 201) and no course at a more advanced level is routinely offered at the University. In these instances, a student will be allowed to take different language courses at different levels (e.g. German 201 and French 101).
- a student takes a 101-level course and no 201-level course is routinely offered. In these instances, a student will be able to take different language courses at the 101 level (e.g. Chinese 101 and Spanish 101).

Students who are unsure about which level of World Language course they should register for can contact the College of Science, Health and the Liberal Arts to schedule a diagnostic assessment. If you studied a foreign language in high school, please use the following guidelines to determine which college-level courses to take:

- No previous study, or one (1) year of a foreign language: 101 course
- Two – four (2-4) years of study: 201 course

There will be an in-class assessment at the beginning of the semester to make sure that students are placed appropriately. The language program reserves the right to decide on students' placement at this stage.

Because the College Studies program serves to broaden a student's global perspective, students who are native speakers of one of the languages presently offered must study a different language or take Area Studies courses to fulfill this category.

Challenge exams in a foreign language can be taken only for those courses presently offered at the University.

Independent study in a foreign language (HUMN-382) may be offered by individual appointment for students who wish to continue beyond the Foreign Language IV level.

#### **World Languages courses:**

ARAB-101, ARAB-102 Arabic I and II

CHIN-101, CHIN-102 Chinese I and II

FREN-101, FREN-201, FREN-301, FREN-401 French I-IV

GER-101, GER-201 German I and II

ITAL-101, ITAL-201, ITAL-301, ITAL-401 Italian I-IV

JAPN-101, JAPN-201, JAPN-301, JAPN-401 Japanese I-IV

SPAN-101, SPAN-201, SPAN-301, SPAN-401 Spanish I-IV

#### **Area Studies courses:**

AREAST-201 Europe

AREAST-202 Latin America

AREAST-205 East Asia

AREAST-208 Africa

AREAST-210 Middle East

AREAST-220 Great Britain: Study Abroad Preparation

AREAST-226 Italy: Study Abroad Preparation

AREAST-227 India and South Asia

#### **Social Sciences I - one course**

Courses in this group acquaint students with the social sciences as a way of looking at human behavior. Social Sciences I courses present a global perspective based on the understanding that we live in an increasingly interdependent world. These courses are interdisciplinary and give students a broad introduction to social scientific methods.

SOC-201 Class, Gender & Race in World Societies

SOC-204	Personality and Global Cultures
SOC-208	The Individual and the Global Environment
SOC-211	Poverty and Power in the Global Economy
SOC-225	Global Politics

### **Humanities I - one course**

Courses in this group examine aspects of the human endeavor through the study of areas such as literature, philosophy, ethics and religion. Using primary texts, these courses address human beliefs and values, including religion and ethical reasoning.

HUMN-225	Exploring World Literature
HUMN-215	Evil and Good
HUMN-223	World Philosophies

### **Junior Seminars: Liberal Arts Seminars and Integrative Professional Seminars - two courses**

Junior seminars are upper-level writing-intensive courses that explore a specific topic in detail. There are two categories of Junior Seminars: Liberal Arts Seminars, which explore select topics in history, the humanities and the social sciences; and Integrative Professional Seminars, which feature topics related to the University's professional majors. Students may take one course from each category or two courses from the Liberal Arts Seminars category.

#### **Liberal Arts Seminars**

JSLA-360	Creative Writing: Shaping Narrative and Experience
JSLA-361	From Fiction to Film
JSLA-362	Artist & Society in Literature and Film
JSLA-363	Shakespeare and Popular Culture
JSLA-370	U.S.: Recent Past
JSLA-380	Human Rights
JSLA-381	Gender Studies
JSLA-390	The Urban Experience
JSLA-391	The African-American Experience

*Go to [www.PhilaU.edu/JuniorSeminars](http://www.PhilaU.edu/JuniorSeminars) before pre-registration to check for additional course offerings in this category.*

#### **Integrative Professional Seminars**

JSINT-384	Applied Professional Ethics
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*Go to [www.PhilaU.edu/JuniorSeminars](http://www.PhilaU.edu/JuniorSeminars) before pre-registration to check for additional course offerings in this category.*

#### **Capstone Course in College Studies:**

##### **COLLST-499 Contemporary Perspectives**

The capstone of the College Studies program, Contemporary Perspectives draws upon the previously completed College Studies courses and makes connections between students' majors and the liberal arts and sciences. Students explore major economic, political and cultural trends in the post-1945 world. All students complete a final research project, which addresses an issue in the professions in light of

current international trends. All students take this 4-credit capstone core course in their senior year. This course is writing intensive and cannot be taken for credit/no credit.

## **POLICIES**

### **College Studies and Transfer Students**

The University is mindful of the need to be accessible to students who transfer from two-year colleges and other four-year institutions. In general, students who transfer academic credit from other colleges to the bachelor's degree program at Philadelphia University may have that credit apply toward the requirements of the College Studies Program.

Courses for which credit can be transferred include all of those College Studies courses for which equivalent courses have been completed at other accredited institutions. Since College Studies courses are designed specifically for Philadelphia University, the University will determine transfer course equivalency.

Two specific courses in the College Studies curriculum, Writing Seminar II and Contemporary Perspectives, serve as keystone courses that require students to reflect on liberal-professional connections at Philadelphia University and to integrate the multiple academic skills they have learned in the other College Studies courses they have completed. Therefore, AP/transfer credit is not awarded for Writing Seminar II or Contemporary Perspectives.

Advanced Placement and College Level Examination Program (CLEP) credits will be accepted under the policy that is currently in effect at the University. Their acceptability to the curriculum will be determined in the same manner as transfer credit from other colleges.

Transfer students should meet with their academic advisors during orientation or at the beginning of their first semester to review whether/how courses taken at other institutions apply to their degree requirements at Philadelphia University.



## UNDERGRADUATE PROGRAMS

### ENVIRONMENTAL SUSTAINABILITY

*The checksheet can be found in the checksheet portion of the catalog.*

#### *Mission*

The B.S. in Environmental Sustainability prepares students for careers as sustainability professionals. Drawing upon Philadelphia University's strengths in professional education, our program equips students with the skills and vocabularies to bridge the multiple disciplines—architecture, design, business, engineering and policymaking—necessary to produce environmentally sustainable operations for communities, businesses and organizations. Our graduates are innovative problem solvers with the interdisciplinary training necessary to build the sustainable societies of the future.

#### *Program Learning Outcomes*

Graduates of the Environmental Sustainability program will be able to:

- Analyze the relationship between human societies and their environments from a variety of cultural, historical, political, economic, ethical and philosophical perspectives
- Employ the appropriate scientific knowledge and laboratory skills necessary to understand and address environmental issues
- Evaluate the capabilities and potential of existing and prospective technologies — architectural, agricultural, mechanical, industrial and energy-producing — that can be combined in order to achieve sustainable processes and outcomes for communities and businesses
- Interact with, and serve as, corporate and organizational leaders to reorganize and orient business practices in the direction of sustainability
- Apply their knowledge and skills from multiple disciplines to real-life sustainability challenges through internships, service learning and capstone projects

#### *Program Description*

Sustainability involves balancing the needs of human societies with the health of the ecosystems that surround and support them. It also challenges us to behave ethically across generations: how can today's societies meet their needs without compromising the ability of future generations to meet theirs? This challenge is growing sharper every day as rapid population and economic growth produce a number of related concerns: climate change, dwindling oil supplies, extreme weather events, shrinking water supplies and the accelerating resource requirements of developing nations like India and China. This combination of issues calls for a new category of experts who can develop and implement the strategies for sustainability.

Designing a sustainable operation, whether at the local, national or global level, requires a comprehensive approach that accounts for the political, cultural, scientific, economic and technological context of the relationship between humans and their ecosystems. Sustainability professionals need to be able to think across these different areas and communicate with a variety of experts and audiences in their own "languages."

The Bachelor of Science in Environmental Sustainability equips students with the skills and vocabularies to bridge the multiple disciplines — architecture, design, business, engineering and policymaking — necessary to produce environmentally sustainable operations for communities, businesses and organizations. Philadelphia University offers the only environmental program in the region with training across these different professional fields, an approach that builds upon the University's strengths and

that produces creative problem-solvers with the skills necessary to build the sustainable societies of the future.

With the increasing global attention to environmental issues, the demand for sustainability experts will continue to rise. Environmental sustainability professionals can expect to build careers in local, state and federal environmental agencies, utility companies, non-profit environmental organizations, wildlife and conservation agencies, environmental consulting and auditing firms, “green” contracting and construction management companies, and educational programs in schools, museums and parks. In addition, the study of environmental sustainability develops scientific and social science skills that can be applied to graduate training in a variety of fields, including law, public policy, education, business and natural resource management. Internship opportunities and multiple elective courses allow students to gain professional experience before graduation and to customize their major according to their career objectives.

## **LAW AND SOCIETY**

*The checksheet can be found in the checksheet portion of the catalog.*

### *Mission*

The B.S. in Law and Society program is an undergraduate, interdisciplinary program that encourages active student participation and debate on issues concerning how competing powers create law, for what purpose and how these laws are implemented. The program develops leadership by building critical thinking and communication skills in an energetic practically-oriented environment. Graduates are prepared broadly for careers in the legal profession, such as law school, paralegal and legal assistantships, and for positions in criminal justice, non-profits and government organizations.

### *Program Learning Outcomes*

Graduates of the Law and Society program will:

- Possess a breadth and depth of professional skills informed by the liberal arts and sciences
- Apply multidisciplinary and collaborative approaches as a means of succeeding in dynamic, complex career environments
- Integrate theory and practice to inform research and guide creative decisions in their professional fields
- Interpret and value diversity in both local and global communities
- Be ethically responsible citizens in the personal, professional and civic spheres
- Bring innovation to their fields and anticipate future directions in their professions by adapting to social, environmental and economic change

### *Program Description*

The rule of law and concepts of social justice provide a foundation for life in modern society and a framework for ethical action for professionals in all fields of work. Knowledge of the origins of American and international legal concepts and systems, and of the ongoing transformation of those systems, is of value in virtually every profession and for every global citizen.

The Law and Society major builds valuable critical thinking and writing skills through the examination of legal systems, courts and conceptions of justice and human rights within both the American and international contexts, and offers opportunities to explore literary, philosophical, ethical and scientific approaches to legal issues. With a multi-disciplinary approach that draws deeply on the liberal arts and social sciences, the Law and Society program also reflects the University’s traditional commitment to practical professional education.

Students earning a B.S. in Law and Society will be well prepared for careers in law, but are by no means limited to such careers. Today's employers seek graduates with critical thinking and communications skills and broad global awareness. The skills and information offered by the Law and Society program prepare its students for work in a broad range of professional areas. Public service, government, NGOs, international businesses, high-tech firms and diplomatic service: these are only a few of the law-related fields affected by the rapidly changing legal environments worldwide.

All Law and Society majors also choose a minor from one of the many professional fields that the University offers, such as business, psychology, languages and environmental sustainability. Opportunities for internships, study abroad and independent research allow students to examine the ways in which legal issues intersect with professional practice in a variety of site locations across many professional fields. Our Career Services professionals help position students for career opportunities after graduation and have an enviable job placement record.

The Law and Society major also opens many doors for students whose career plans include graduate study in fields such as law, business, medicine, public health, political science, sociology and urban policy and planning. Students preparing specifically for careers as lawyers can take advantage of our professional advising program that supports them on their way to law school.

### **PROFESSIONAL COMMUNICATION**

*The checksheet can be found in the checksheet portion of the catalog.*

#### *Mission*

The Professional Communication major is a dynamic, interdisciplinary program featuring the intersection of text and image with a focus on writing and editing. Special emphasis is placed on emerging technologies, specifically social media. Graduates will be prepared for roles as communication specialists in corporations, non-profits and government, as well as boutique PR and advertising firms and technology start-ups.

#### *Program Learning Outcomes*

Graduates of the Professional Communication program will:

- Demonstrate ability to create communications and to express ideas clearly and logically in multiple media formats to multiple audiences
- Apply the principles of management, marketing and design to communication problems
- Demonstrate theoretical and social understandings of communication in a variety of contexts
- Demonstrate high ethical standards in all communication practices
- Apply innovative thinking as they adapt communication methods in response to changing media landscapes
- Research effectively, using multiple methods and information technologies and communicating findings to multiple audiences

#### *Program Description*

Professional Communication is a growing field dedicated to writing and presenting information using emerging technologies and new media. Students majoring in the Bachelor of Science in Professional Communication sharpen their abilities to integrate texts, images, sounds and motion while preparing for jobs as communication specialists in business, government and the non-profit sector. Studying the theory and practice of communication also enhances writing, researching and presenting skills that students can apply to graduate training in areas such as law, public affairs, education, journalism and business administration.

The Professional Communication course sequence is dynamic and interdisciplinary. Students complete a wide range of individual and collaborative projects that examine how communication affects disciplines and professions in business, design, the sciences and the health professions. The Professional Communication program includes a solid foundation in how human, consumer and organizational behavior relate to communication practices. Internship opportunities, job shadowing and multiple elective courses enable students to gain additional professional experience they can use while tailoring their major to meet specific career objectives.

Graduates of Professional Communication, depending on their areas of focus, will work as writers, public relations specialists, website content developers, corporate communication representatives, bloggers, journalists and editors. Their work will involve responsibilities such as writing and editing for print and digital publications, using new media to create effective presentations and serving on interdisciplinary teams dedicated to client-based projects in professional and public arenas across the globe.

The program philosophy for Professional Communication honors innovation, rhetorical awareness and strategy and ethical practice. The program is committed to preparing students for communication jobs in business, government and the non-profit sector, as well as for lives as continuous learners who are able to adapt to change.

## **BIOCHEMISTRY**

*The checksheet can be found in the checksheet portion of the catalog.*

### *Mission*

The mission of the Biochemistry program at Philadelphia University is to provide a high quality, rigorous, American Chemical Society accredited curriculum that prepares our undergraduate students for the disciplines of chemistry and biochemistry where critical and analytical thinking skills, collaboration, innovation and a yearning for discovery are essential traits. Our stimulating and supportive environment allows students to grow intellectually and professionally through a curriculum that stresses thorough understanding of chemical concepts and principles while developing essential practical, hands-on skills through laboratory experiences such as faculty-led research and laboratory-based courses. In addition, the mission of the University ensures that not only do our graduates possess the essential mathematical and scientific skills to be successful in the chemical and biochemical disciplines, they also become lifelong, community-engaged learners as a result of our rigorous college studies curricula.

### *Program Learning Outcomes*

A biochemistry major who graduates from Philadelphia University will:

- Describe the fundamental laws and theories of chemistry pertaining to the properties of matter, chemical reactions and their stoichiometry, properties of gases, solution chemistry and acid and base chemistry.
- Describe the chemistry of organic molecules including functional group structure and properties, structure and stereochemistry of alkanes, nucleophilic substitution and elimination reactions of allyl halides, the structure/synthesis/reactions of alkenes, alcohols, aromatic compounds, aldehydes and ketones.
- Summarize chemical thermodynamics, chemical kinetics and quantum mechanics and relate this information to modern day chemistry.
- Develop the language, terms and critical thinking/problem solving skills to use, understand and trouble-shoot analytical instrumentation used in chemistry and biochemistry today.
- Acquire the necessary 'bench top' laboratory skills, including knowledge of laboratory safety and behavior, to be functional with laboratory equipment and techniques.
- Describe the utility and history of inorganic chemistry including atomic structure, simple bonding theory, symmetry and group theory, coordination chemistry and molecular orbital theory.

- Describe metabolism (including signaling mechanisms, basic biochemistry of DNA and RNA and mechanisms of control of gene expression), protein structure-function and laboratory techniques used in biochemical research.
- Garner information and critically analyze information (Information Literacy skills in general).
- Effectively communicate in written formats germane to the sciences.
- Successfully use their garnered research skills to probe new avenues of scientific inquiry.
- Utilize communication skills to disseminate research to both the general public and the scientific community.

### *Program Description*

The Bachelor of Science in Biochemistry combines the disciplines of biology and chemistry to enable students to pursue careers in research, industry and advanced study in graduate programs. A variety of opportunities exists in research and development in the pharmaceutical industry, specialty-chemical companies and genetics, molecular biology and bioengineering research. The program provides an appropriate preparation for medical and other health sciences professional schools. Biochemistry majors maintain a consistently high placement rate in major-related careers and graduate school programs.

A wide array of career choices are available to professionals in this important field, including research-management positions at large pharmaceutical and chemical companies such as GlaxoSmithKline, McNeil Pharmaceuticals, Rohm and Haas, DuPont, Merck and Eastman Kodak.

The program, accredited by the American Chemical Society (ACS), not only prepares students for careers in research, development or production in the chemical industry, but for advanced study in graduate and/or medical school. The University maintains close ties with the ACS, which frequently invites students to present their research findings at meetings. Students have recently given presentations in Washington, D.C., San Francisco and San Diego. Students accumulate field-related research experience throughout their college careers due to the small class size and “hands-on” approach by faculty. As a result, many students have seen their work published in scholarly journals as early as the freshman year.

### **BIOLOGY**

*The checksheet can be found in the checksheet portion of the catalog.*

#### *Mission*

The mission of the Bachelor of Science in Biology is to provide students with a strong foundation of knowledge, analytical and technical skills to prepare them for graduate study and/or for careers in the biological sciences.

#### *Program Learning Outcomes*

Graduates of the Biology program will:

- Exhibit the ability to convey biological information through effective written expression and oral communication
- Be proficient at accession and critical review of biological literature
- Write laboratory reports in an acceptable format based on the outcomes of lab exercises
- Demonstrate ability to execute laboratory skills including analytical technology
- Interpret graphical, tabular and other methods of presenting data
- Analyze and comprehend methods of experimentation
- Apply information from biology core courses to prepare for advanced studies
- Gain exposure to the biological sciences as a profession

### *Program Description*

The Bachelor of Science in Biology at Philadelphia University affords students opportunities to pursue careers or graduate and professional study in disciplines as diverse as biotechnology, genetic counseling, pharmaceuticals, cellular and molecular biology, immunology, cancer research and secondary education. An investigative approach in field and laboratory courses promotes development of technical competence as well as conceptual understanding. Many students hone their analytical skills through research with faculty on campus or at other institutions through internships and may present their work at professional society meetings or publish in scientific journals. Students are strongly encouraged to participate in the student group "Science in Action" which sponsors academic, recreational, community service activities and a year-end student poster presentation.

### **BIOPSYCHOLOGY**

*The checksheet can be found in the checksheet portion of the catalog.*

#### *Mission*

The Biopsychology curriculum provides students with a broad understanding of the biological bases of behavior. The curriculum provides students with an in-depth understanding of the scientific foundation for psychology and the resulting connections between psychology and biology. The Biopsychology curriculum integrates psychology and the natural sciences to provide a fuller understanding of the biological bases of behavior. The biopsychology major is a science-based curriculum designed to prepare students for careers in the medical or allied health fields, direct entry into medical/pharmaceutical research or graduate programs in various science-based disciplines.

#### *Program Learning Outcomes*

Graduates from the biopsychology major will:

- Analyze and apply the scientific process to psychology.
- Locate, retrieve, critically evaluate and communicate scientific data and knowledge.
- Communicate effectively and professionally.
- Express expertise in specific content areas of psychology.
- Display knowledge of the ethical standards, personal integrity and professional responsibilities of psychologists.
- Apply principles and practice of core information and values in a psychology practice environment through internships and applied research.

#### *Program Description*

Interest in biological explanations of behavior has increased dramatically in the last decade and has led to a greater appreciation for researching brain functioning in order to understand behavior. The demand for highly-trained, behaviorally-oriented scientists in academic and industrial research has been substantial and is reflected in the rise of graduate programs in biopsychology and related fields such as neuroscience. The Bachelor of Science in Biopsychology integrates psychology and the natural sciences to provide a fuller understanding of the biological basis of behavior. The Biopsychology major is a science-based curriculum designed to prepare students for medical school, direct entry into medical/pharmaceutical research or graduate programs in psychology, biopsychology, animal behavior, neuroscience and occupational therapy. Students will complete a common core of courses in psychology and science and select one of three concentration tracks: Animal Behavior, Graduate Study or Pre-Medical Studies.

### *Psychology Concentration Option*

(select one, seven-course option)

### *Pre-Medical Studies Option*

- CHEM-201/201L, CHEM-202/202L, PHYS-201/201L, PHYS-203/203L and three additional advanced courses from biology and psychology areas (see advisor)

### *Animal Behavior Option*

- CHEM-207/207L, ECBIO-201, ECBIO-301 and four additional advanced courses from biology and psychology areas (see advisor)

### *Graduate Study Option*

- Seven advanced courses from biology and psychology areas (at least three from each area; see advisor)

## **CHEMISTRY**

*The checksheet can be found in the checksheet portion of the catalog.*

### *Mission*

The mission of the Chemistry program at Philadelphia University is to provide a high quality, rigorous, American Chemical Society accredited curriculum that prepares our undergraduate students for the disciplines of chemistry and biochemistry where critical and analytical thinking skills, collaboration, innovation and a yearning for discovery are essential traits. Our stimulating and supportive environment allows students to grow intellectually and professionally through a curriculum that stresses thorough understanding of chemical concepts and principles while developing essential practical, hands-on skills through laboratory experiences such as faculty-lead research and laboratory-based courses. In addition, the mission of the University ensures that not only do our graduates possess the essential mathematical and scientific skills to be successful in the chemical and biochemical disciplines, they also become lifelong, community-engaged learners as a result of our rigorous college studies curricula.

### *Program Learning Outcomes*

Graduates from the chemistry major will:

- Describe the fundamental laws and theories of chemistry pertaining to the properties of matter, chemical reactions and their stoichiometry, properties of gases, solution chemistry and acid and base chemistry.
- Describe the chemistry of organic molecules including functional group structure and properties, structure and stereochemistry of alkanes, nucleophilic substitution and elimination reactions of allyl halides, the structure/synthesis/reactions of alkenes, alcohols, aromatic compounds, aldehydes and ketones.
- Summarize chemical thermodynamics, chemical kinetics, and quantum mechanics and relate this information to modern day chemistry.
- Develop the language, terms and critical thinking/problem solving skills to use, understand and trouble-shoot analytical instrumentation used in chemistry and biochemistry today.
- Acquire the necessary 'bench top' laboratory skills, including knowledge of laboratory safety and behavior, to be functional with laboratory equipment and techniques.
- Describe the utility and history of inorganic chemistry including atomic structure, simple bonding theory, symmetry and group theory, coordination chemistry and molecular orbital theory.

- Describe metabolism (including signaling mechanisms, basic biochemistry of DNA and RNA and mechanisms of control of gene expression), protein structure-function and laboratory techniques used in biochemical research.
- Garner information and critically analyze information (IL skills in general).
- Effectively communicate in written formats germane to the sciences.
- Successfully use their garnered research skills to probe new avenues of scientific inquiry.

### *Program Description*

The Bachelor of Science in Chemistry, accredited by the American Chemical Society (ACS), not only prepares students for careers in research, development or production in the chemical industry, but also for advanced study in graduate and/or medical school.

The two options within this program, chemistry and environmental science, provide the student the opportunity to investigate and to research developments in modern chemistry. Upper-level chemistry majors may work with a faculty member on a research project of mutual interest. As a result of these projects, some of the students have seen their work presented in national meetings and published in scholarly journals. The University maintains close ties with the ACS, which welcomes information about student research at its regular meetings.

By working with faculty on real projects, students learn how to complete each step of an independent research project that leads to the production of a scientific report suitable for publication in peer-reviewed journals. Recent faculty-student partnerships have led to joint presentations at national conferences in Atlanta, Toronto, Denver, San Diego and New Orleans.

Chemistry affects our daily lives more than most people realize. From the paint we use to decorate our homes and the dyes used to create patterns in everyday items such as apparel and home furnishings, to the antibiotics prescribed to us by our doctors, experienced chemists are needed to produce many of the practical, revolutionary and necessary goods we often take for granted. Field-related research and experience are offered as part of the University's Chemistry major, preparing graduates for an abundance of career opportunities. Chemistry majors maintain a consistently high-placement rate in major-related careers and graduate school programs. Large pharmaceutical and chemical companies such as GlaxoSmithKline, McNeil Laboratories, Rohm and Haas, Merck and DuPont hire our students to become research chemists, managers and associates, based on their outstanding classroom and laboratory experience and extensive research work, beginning as early as the freshman year. Faculty-student research partnerships are an important part of the program.

Students have the option of choosing advanced study in Chemistry or Environmental Science.

## **ENVIRONMENTAL AND CONSERVATION BIOLOGY**

*The checksheet can be found in the checksheet portion of the catalog.*

### *Mission*

The Environmental and Conservation Biology major is designed to prepare students for a wide range of environmental careers in government agencies, non-profit organizations, research and consulting. The major emphasizes skills development in plant and animal field identification, GIS technology, chemical analysis, experimental design, wildlife management and ecology. Emphasis is given to internships, research and field courses for hands-on skill development as upper level ECBIO electives.

### *Program Learning Outcomes*

Graduates of the Environmental and Conservation program will:



- Effectively communicate in written and oral formats on complex environmental topics analyzing the pros/cons based on current scientific literature.
- Demonstrate synthesis of complex environmental data into a series of practical management recommendations for an outside agency.
- Successfully demonstrate knowledge of plant and animal species field identification.
- Explain environmental science and conservation concepts, relationships and best management practices (BMP) to a wide variety of audiences (public, K-12 audience, Board of Trustees, professional scientific community).
- Engage in professional experience in the field through hands-on training for a competitive advantage on internships, research, fellowships and job placement.

#### *Program Description*

The new, innovative Environmental and Conservation Biology major prepares students for a wide range of environmental careers in government agencies, nonprofit organizations, research and consulting. The program emphasizes skills development in plant and animal field identification, Geographic Information Systems (GIS) technology, chemical analysis, experimental design, urban landscape planning, wildlife management and ecology. Exciting opportunities are provided for students to develop and apply their expertise through internships, research and field courses. These include marine conservation in Jamaica, wildlife management in Yellowstone National Park and water quality sampling techniques in the Delaware and Chesapeake bays.

*The Environmental and Conservation Biology check sheet can be found on page 145.*

## **HEALTH SCIENCES**

*The checksheet can be found in the checksheet portion of the catalog.*

#### *Mission*

By offering a strong foundation of natural science courses combined with human sciences, psychology and unique clinical experiences, the Bachelor of Science in Health Science prepares graduates for entry into professional and graduate schools in a variety of allied health fields.

#### *Program Learning Outcomes*

A Health Sciences graduate will:

- Demonstrate the ability to choose appropriate scientific and medical resources from library databases searches.
- Identify key anatomic structures, define their function and discuss their relationship to disease.
- Identify principles of normal psychological development and identify deviations from normal.
- Describe normal physical and mental development from birth to death.
- Identify and explain the role that disease can exert on a person's physical and mental function.
- Work productively and professionally with others in groups.
- Work effectively with others to debate an ethical dilemma.
- Apply principles of respect to patients that they encounter in a clinical environment.
- Be accepted to and enrolled in graduate programs or work in a health care field.

### *Program Description*

The health care job market is one of the fastest growing segments of the economy today in the United States. The need for additional health care providers and allied health personnel is rapidly expanding. Graduates from the B.S. in Health Sciences will have the necessary preparation in science, psychology and the liberal arts to successfully gain admission into and complete a graduate program for many allied health professions. They will also gain the skills in information literacy needed to answer relevant professional questions through database searching and critical analysis of original research, as well as become proficient in written, verbal and electronic communication.

The curriculum includes a strong foundation of natural science courses combined with human sciences, psychology and unique practical and clinical experiences. Each student is required to complete an extensive volunteer and shadowing experience as part of their coursework. Students are encouraged to explore a variety of health care opportunities by shadowing and gaining patient contact at a variety of area hospitals and clinics. The free electives that are built into the curriculum allow students to explore an area of specialization or sample a variety of different courses that are offered at the University. Students also have the opportunity to study abroad.

Philadelphia University provides exceptional facilities for the Health Sciences program. In addition to the fully-equipped genetics, microbiology and histology labs, there is a physical diagnosis lab and gross anatomy (cadaver dissection) lab which students will have the opportunity to explore. The small class size fosters peer interaction and a close-knit community of students and faculty.

Students pursuing a Bachelor of Science in Health Sciences will be prepared to enter into professional and graduate schools in a variety of allied health fields. Students can pursue a career or graduate study in diverse disciplines such as physician assistant studies, occupational therapy, physical therapy, exercise science, community health, social work, community counseling, education, research, rehabilitation, crisis intervention, health care administration, public health and human resource management. The opportunities are boundless.

### **PRE-MEDICAL STUDIES**

*The checksheet can be found in the checksheet portion of the catalog.*

### *Mission*

Pre-Medical Studies is an “umbrella major” providing academic and professional training to students planning to attend medical school as well as other graduate health care institutions. The major is distinguished by a series of unique upper-level science courses, whose case history and problem-based learning approach mirrors that of first-year graduate students in the health care professions, and which are designed to develop students’ proficiency in interpreting complex scientific data. Students spend 100 hours developing their empathic, professional and clinical evaluation skills through two hands-on, off campus preceptorship experiences performed with licensed health care practitioners. Our graduates are nationally competitive, as evidenced by their MCAT, GRE and DAT scores, and over 90 percent of our students to date have gone on to various successful careers as physicians, dentists, physical therapists, veterinarians, pharmacists, optometrists, podiatrists and chiropractors.

### *Program Learning Outcomes*

Upon graduation the Pre-Medical Studies major will be able to:

- Demonstrate knowledge of health care through hands-on training in HIPAA law, taking history and basic physical measurements and professional conduct with patients
- Demonstrate oral and written communication skills with both lay people and professionals

- Recognize and use medical terminology
- Develop formal, analytical, synthetic and problem solving science skills
- Synthesize information from diverse sources to make decisions
- Recognize the social challenges faced in both national and global medical practice
- Comprehend and be able to explain a variety of commonly used clinical laboratory techniques
- Recognize and employ the professional empathy needed in an effective health care professional
- Demonstrate an optimal performance on national standardized graduate school exams (MCAT, GRE, DAT etc.)
- Recognize the varied health care careers and their spheres of expertise

### *Program Description*

The future medical practitioner must be a capable scientist able to make independent judgments and data evaluations in order to treat the patient. It is the goal of the Bachelor of Science in Pre-Medical Studies to prepare students for these professions. Philadelphia University has a strong basis in health care stemming from a long-established Physician Assistant Studies program, Occupational Therapy and Midwifery programs. Combined with the University's diversity of focus, including both science and liberal arts strengths, this results in a graduate who has the analytical, verbal, written and empathic skills necessary to become an effective health practitioner.

Faculty involved in the Pre-Med curriculum have been active in developing novel methods of instruction and assessment of students skills, which include the use of case-history analyses, discussion of social and ethical aspects of medicine and disease risk assessment through genetic monitoring. Students also develop their empathy and professional skills through two unique, three-credit preceptorships, when they receive off-campus training and work hands-on with health care professionals, several of whom are Philadelphia University alumni. As well as receiving grades for these experiences, students learn firsthand what being in health care means. At Philadelphia University, we are aware that a successful student is one who is nurtured and advised during their formative, science-intensive, four-year experience so that they can develop and discover all their talents. For the Pre-Med program, the mentoring and monitoring of their progress as they proceed through the curriculum is both via an effective Pre-Med Committee, and by dedicated Pre-Med advisors, all of whom are previous health care graduates. In order to be a successful candidate for any graduate school, students must maintain a 3.0 minimum GPA, at least between their sophomore and senior years. Any student not maintaining a GPA commensurate with success in the major will be asked to transfer to another major by the Pre-Med Committee, as this will be considered ineffective progress towards graduation. Philadelphia University Pre-Medical Studies graduates have an excellent placement record in medical, osteopathic, dental and veterinary schools including University of Pennsylvania, Temple University, Thomas Jefferson University, University of Maryland, Philadelphia College of Osteopathic Medicine and New York College of Osteopathic Medicine. The Program has developed a scholarship program for Pre-Medical Students to attend a MCAT (Medical School Admission Exam) Preparation Program and has developed affiliation agreements with medical and other professional schools.

### **Articulation Agreements:**

#### *Articulation Agreement with Kornberg School of Dentistry (3+4)*

Students enrolled in the Pre-Medical Studies Major will be required to follow a special curriculum, maintain at least a 3.2 GPA and take the Dentistry Assessment Test (DAT) in the summer between their sophomore and junior year. Acceptance to Kornberg will then be commensurate on a successful interview with Kornberg and the student obtaining the same mean DAT score as the incoming class for the fall of the following year. A successful student would then transfer to Kornberg at the end of their junior year. Credits for the final senior year and the undergraduate B.S. in Pre-Medical Studies, will then

be provided by select courses taken by the students during the freshman doctor of dental medicine (DDM) graduate school program at Kornberg.

*Articulation Agreement with Logan School of Chiropractic Medicine (3+3)*

Students enrolled in the Pre-Medical Studies Major will be required to follow a special curriculum, and maintain at least a 3.0 GPA but need take no graduate assessment tests. Acceptance to Logan will then be commensurate on a successful interview and recommendation letters by pre-medical studies faculty. A successful student would then transfer to Logan at the end of their junior year. Credits for the final senior year and the undergraduate B.S. in Pre-Medical Studies will then be provided by select courses taken by the students during the freshman graduate school doctor of chiropractic (DC) program at Logan.

*Affiliation Agreement with Philadelphia College of Osteopathic Medicine (PCOM)*

Students enrolled in the Pre-Medical Studies Major will be required to maintain at least a 3.2 GPA during the program. They would then sit for the medical college assessment test (MCAT) and include PCOM on their list to the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS), in the summer between their junior and senior year. Acceptance to PCOM will then be commensurate on a score of at least 8 on each section of the MCAT (total of 24), a successful interview and favorable recommendation letters by pre-medical studies faculty. Upon graduation from Philadelphia University the student would then enter the doctorate of osteopathic medicine (DO) program at PCOM in the following fall.

**PSYCHOLOGY**

*The checksheet can be found in the checksheet portion of the catalog.*

*Mission*

The Psychology curriculum is designed to provide students with a broad understanding of the goals and possibilities of the field of psychology. The curriculum provides students with an in-depth understanding of the principles of behavior, the scientific methods used to derive those principles and appropriate ways to apply such knowledge. The Psychology curriculum is designed to meet the educational requirements for graduate school in psychology or for students planning careers outside of academic psychology.

*Program Learning Outcomes*

Graduates from the Psychology major will be able to:

- Analyze and apply the scientific process to psychology.
- Locate, retrieve, critically evaluate and communicate scientific data and knowledge.
- Communicate effectively and professionally.
- Express expertise in specific content areas of psychology.
- Display knowledge of the ethical standards, personal integrity and professional responsibilities of psychologists.
- Apply principles and practice of core information and values in a psychology practice environment through internships and applied research.

*Program Description*

Psychology is the scientific study of behavior. The Bachelor of Science in Psychology is designed to provide students with a broad understanding of the goals and possibilities of the field. The curriculum

provides students with an in-depth understanding of the principles of behavior, the scientific methods used to derive those principles and appropriate ways to apply such knowledge.

The Psychology curriculum is designed to meet the educational requirements for graduate school in psychology or for students planning careers outside of academic psychology. Students take a core group of courses that emphasize the research-based nature of psychology and select additional courses in psychology depending upon their interests and goals. At the senior level, students conduct an advanced research project and may pursue internships at local counseling centers, human-services agencies, hospitals, residential treatment centers or other locations.

Psychology graduates may choose to work in professions such as counseling, social work, education or research. Other positions available to Psychology majors include human resource management, rehabilitation, community counseling and crisis intervention. The major allows students the flexibility to pursue graduate studies in related disciplines such as education, occupational therapy and management.

## **GRADUATE PROGRAMS**

### **MASTER OF SCIENCE IN DISASTER MEDICINE AND MANAGEMENT**

Program Director: Jean Bail, Ed.D., RN, MSN, CEN, EMT-P

Campus Location: This is primarily a distance-learning program with a one-week, on-campus requirement. Hybrid sections with seminar time are available for many courses, combining online course requirements with in-person activities.

#### *Mission*

Disaster Medicine and Management is a graduate program focusing on a comprehensive foundation of disaster medicine and emergency management principles and practice. The program recognizes that there is an overwhelming global need to educate professionals whose expertise will be needed to prepare for, respond to and recover from natural and man-made disasters and mass casualty incidents. Through experiential learning and intensive online work, learners apply written and verbal communication skills, research analysis, interdisciplinary collaboration, and critical thinking to operational approaches of disaster management.

#### *Program Learning Outcomes*

Graduates of the Disaster Medicine and Management Program will be able to:

- Apply information from the core subjects in disaster/emergency management to prepare for participation in the global response community.
- Effectively communicate in written and oral formats complex, analytical emergency response needs, analysis, plans and policies.
- Analyze the current literature to discuss the practice of disaster management and contribute to the knowledge base.
- Apply multi-disciplinary and collaborative approaches to integrate theory and practice to inform the management of potential disasters, and to prepare for future disasters using an all-hazards approach.
- Introduce/change to the field by using a strong foundation in the history and practice of disaster management to anticipate future directions.
- Apply core information to develop and implement a systematic approach to exercise development, evaluation, and post exercise evaluation activities.

#### *Program Description*

Recent events in our nation and the world have focused our attention on the prevalence of disasters, mass casualty situations and public service disruptions including terrorism, biological and chemical terrorism, war, tsunamis, earthquakes, hurricanes, floods, wildfires, volcanoes and major power grid disruptions. Additionally, we are facing an increasing number of accidents involving hazardous materials. The effects of all of these events on people, animals, the environment, physical structures and our public infrastructure have been immense. This has brought increased attention to our public safety, emergency medical services (EMS) and public health systems in terms of disaster preparedness. The need for a highly organized disaster preparedness infrastructure and individuals with expertise in this area has become readily apparent to the government and private sector. Disaster emergency planning and management has become an expanding area of study in the fields of medicine, emergency medical services, public safety, mental health, public health and the military.

The Master of Science in Disaster Medicine and Management is a comprehensive graduate degree program encompassing all facets of disaster management. The program encompasses the study of: terrorism, weapons of mass destruction, hazardous materials, natural disasters, psychological aspects of disasters, acute traumatic stress intervention, public health considerations of disasters, research methods and disaster planning and management including risk assessment, incident command and resource allocation. The program is delivered as a partnership between Philadelphia University and the Department of Emergency Medicine of the Albert Einstein Health Network.

This program is offered in two formats: a flexible distance-learning process or a hybrid model combining the online requirements with seminar and in-person activities. The program is designed as a 36-credit, 12-course curriculum that can be completed in one to three years depending on the course load taken by the student. The courses will be offered in four 12-week semesters per year. Courses will be offered in a distance-learning format using the BlackBoard® course management system with a variety of teaching modalities such as online PowerPoint® lectures with audio, asynchronous discussion boards, synchronous chat rooms, via Adobe Connect, reading assignments, research papers, online journals and online testing. The Hybrid course delivery model includes the online materials plus seminars and activities as directed by the faculty. Students will be required to attend one six and a half day, on-campus, summer seminar that will include live lectures, hands-on skills labs, role-playing seminars, disaster drills and table-top exercises. This summer seminar is a mandatory component of two of the required courses (DMM635 and DMM639). Students will also be required to complete a capstone experience that has several options, but a formal thesis is not required. The program can arrange for students to participate in an internship at a site that provides emergency and disaster planning and preparedness in the United States and internationally.

The program also offers two nine-credit, three-course, graduate certificates for professionals seeking a less intensive educational experience. One involves core material on Disaster Medicine and Management for those seeking a less intensive educational experience. The second certificate addresses business and crisis continuity issues exploring organizational continuity, risk assessment and organizational recovery.

#### *E-Learning at Philadelphia University*

The program is offered in a flexible online environment. In the online delivery model, the vast majority of this is asynchronous and can be completed on the student's own schedule provided the student meets the required examination and assignment deadlines. The hybrid model combines the online platform and expands the material using campus based seminars and activities chosen by the faculty.

#### *Program Hardware and Software Requirements:*

- Access to a computer with the Windows operating system (Windows 2000, Windows XP or above) and the capacity to hear audio (sound card). Also, a USB microphone is required and web cam capability will be useful.
- Internet access with high speed connection (DSL, Broadband or cable)
- Microsoft Office software (Word and PowerPoint)

#### *Admission to the Program*

Applications to the program should be submitted to the Philadelphia University Office of Graduate Admissions. Admission into the program requires a bachelor's degree, undergraduate transcripts, a current resume, two letters of recommendation and a personal essay. Admission to the program will be

based on several criteria: undergraduate GPA; relevant work experience; two letters of reference; a personal essay; and whether or not the applicant has completed the required prerequisites (see below). The GRE is not required. Those applying for a graduate assistantship may wish to take the GRE's to be more competitive for this award.

*Prerequisite Courses*

English Composition or College Writing	3
College-level Math or Statistics	3
General Biology or Anatomy and Physiology or Equivalent	3-4
Introductory Psychology or Behavioral Science Course	3

**CURRICULUM**

*Core Courses*

DMM611	Principles of Disaster Medicine and Management	3
DMM631	Organizational Management & Communication in Disasters	3
DMM635	Psychological Aspects of Disasters (Distance learning & mandatory on-campus experience)	3
DMM639	Principles of Disaster Exercises & Drills (Distance learning & mandatory on-campus experience)	3
DMM643	Public Health Implications of Disasters	3
DMM647	Disaster Emergency Planning	3
DMM651	Applied Research Methods & Statistics	3
DMM755	Capstone Experience in Disaster Medicine and Management: Master's Project (Distance Learning Only) Master's Project with Internship	3
Electives:	(Choose four from the following)	
DMM612	Foundations of Homeland Security & Defense	3
DMM615	Hazardous Materials & Industrial Safety	3
DMM617	GIS in Emergency Management	3
DMM619	Natural Disasters	3
DMM623	Weapons of Mass Destruction	3
DMM624	Organizational Risk and Crisis Management	3
DMM625	Business and Crisis Continuity	3
DMM626	Organizational Recovery and Planning	3
DMM627	Principles of Terrorism	3
DMM648	Emergency Preparedness with Special Needs Populations	3
DMM649	Health care Emergency Management	3
DMM653	Clinical Disaster Medicine	3
DMM791	Internship in Disaster Medicine and Management	3
DMM797	Special Topics in Disaster Medicine and Management	1-3
TOTAL CREDIT HOURS: 36 Credits		

**Graduate Certificate in Disaster Medicine and Management**

Core Courses (Required):

DMM611	Principles of Disaster Medicine and Management	3
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DMM647	Disaster Emergency Planning	3
Electives:	(Choose any one DMM course)	3
TOTAL CREDIT HOURS: 9 Credits		

### **Graduate Certificate in Business and Organizational Continuity**

DMM625	Business and Crisis Continuity	3
DMM624	Organizational Risk and Crisis Management	3
DMM626	Organizational Recovery and Planning	3
TOTAL CREDIT HOURS: 9 Credits		

## **MASTER OF SCIENCE IN MIDWIFERY**

Program Director: Katherine Dawley, CNM, Ph.D.

Campus Location: 222 Hayward Hall, The Midwifery Institute of Philadelphia University offers distance-learning programs with and without on-campus requirements.

### *Mission*

The mission of the Midwifery Institute of Philadelphia University is to offer quality educational preparation of midwives who will advance the profession of midwifery for the betterment of the health of women and their families.

The Midwifery Institute of Philadelphia University believes:

- Midwifery care is the exemplary health care standard for all women.
- Midwifery education models midwifery practice.
- Distributive (distance) learning provides user friendly access to quality midwifery education.
- It is desirable to educate students who reflect the racial, ethnic and cultural diversity of the country.
- Learning is individualized through use of a wide variety of teaching/learning methodologies.
- Master's preparation for midwifery practice and research is optimum for the 21st century's increasingly complex health care environment.
- It is important for midwifery students and practicing midwives to pursue advanced education with a discipline specific focus in midwifery.

### *Program Learning Outcomes*

After completion of the program, the graduates of the Midwifery Institute will:

- Provide consistent evidence based clinical midwifery care that integrates theory, clinical knowledge, clinical reasoning and an understanding of past and present professional issues to support safe beginning level midwifery practice according to the Core Competencies of the ACNM.
- Demonstrate provision of independent, consultative, and collaborative midwifery practice at the level of care appropriate to a women's clinical status.
- Demonstrate necessary research and critical thinking skills to engage in ongoing evidence based clinical practice.
- Describe diversity issues inherent in the lives of women they serve and the effects of these issues on women's health and the provision of health care.

- Demonstrate cultural humility and competence when caring for women.
- Be professionally responsible midwives and practice according to the Code of Ethics and Standards of the ACNM.

### *Program Description*

Philadelphia University provides an exciting way to earn the Master of Science in Midwifery through distributive, at home/anytime learning in the fundamentals of the art and science of midwifery, research, health policy and selected advanced clinical and professional competencies. This program, initiated in 1998, prepares qualified individuals with a Bachelor's degree and individuals with a Bachelor's degree and an RN (Registered Nurse) credential in the practice of midwifery and prepares them to sit for the American Midwifery Certification Board's (AMCB's) national certification exam. Upon successful completion of the board exam, they earn the right to use the title CM or CNM.

The Midwifery Institute of Philadelphia University offers a 6 semester, 2 year graduate-level, distance-education program for midwifery. Students can be admitted with a class cohort in either the fall or spring semesters. For those who prefer not to attend full-time, this program can also be completed through part-time study over 3 years.

From the beginning, the Midwifery Institute's education program was designed for distance learning and values and builds upon the student's previous education and life experience. State-of-the-art communication technology, coupled with the professional expertise of an accomplished and caring faculty, maximizes the educational experience. The program model focuses on graduate-level skills of inquiry and critical thinking.

The program integrates theory and practice into six full time or nine part time semesters of primarily asynchronous study, clinical experience and two week-long on-campus sessions. The theoretical components of midwifery are learned through readings, seminar room discussions, problem-based learning, writings, quizzes and examinations. The practice components are learned through a clinical practicum, close to home, under the direction of a qualified midwife preceptor.

The program is modeled on midwifery-practice principles. The role of the Midwife Tutor is unique at The Midwifery Institute of Philadelphia University and is the foundation of our model for midwifery education, which mimics the midwifery model of care for women. Students are treated with respect as individuals and provided a personalized approach that encompasses all aspects of the education process including advising, evaluation and supervision.

Midwife Tutors focus on facilitation of learning through a process similar to the midwife's role during labor. Both roles require the ability to challenge, assess, confront, encourage, provide feedback, assist, listen and problem solve. This process meets the challenge of distance education and facilitates learning in an environment where students and faculty share the responsibility for lifelong learning.

Online seminar rooms are full of thoughtful discussions about the art and science of midwifery practice, reflections on the role transition to midwife, midwifery research, education and health policy. Students interact asynchronously with each other and the faculty via computer and learning can happen day or night, seven days a week, when the student is ready to focus on school, and yet remain in the comfort of home.

As adult learners, students are able to reach their professional goals while building relationships within their online learning community. This national networking is an asset as graduates enter the work world. The faculty sees the midwife within each student and is able to facilitate individual growth and development into the role of midwife, assuring the vitality and vision for the future of midwifery. The midwifery program remains on the cutting edge of a rapidly changing world, by weaving tradition with technology.

The 21st-century midwife must be prepared for evidence-based practice, requiring increasingly sophisticated skills in the analysis of evidence and practice of midwifery. Today's midwife supports practice with research and respects both the art and science of midwifery. Changes in the healthcare environment require midwives to be advocates in for health care of women and families at a policy level as well as at the bedside. Frequently, midwives act as administrators, teachers and advanced clinical practitioners. This program facilitates professional development in these areas through excellent teaching, innovative technologies and engaging project-based learning activities.

In preparation for meeting these professional challenges, students engage in a comprehensive, 62 credit course sequence to prepare for professional clinical practice. The program is fortunate to have a diverse, experienced faculty in midwifery education, clinical practice, research, policy, education and international midwifery. A career in midwifery requires lifelong learning and the faculty continues to be partners in the professional growth and development of midwives, students and the profession of midwifery.

The M.S. in Midwifery Program prepares a graduate to be:

- A safe beginning practitioner of midwifery.
- A provider of primary health care for women across the lifespan as a member of an interdisciplinary health care team.
- An advocate for the betterment of women's health.
- A participant in lifelong learning.
- An active member in the profession of midwifery.
- A critical thinker with the skills to analyze and synthesize research into evidence-based practice.
- Politically aware, active in the profession of midwifery and knowledgeable about health policy in the United States.

#### *Unique Program Requirements*

Successful students of distance-learning programs are self-motivated and disciplined. Midwifery education at Philadelphia University requires extensive reading of primary-source materials in professional journals. Students are expected to demonstrate their ability to think and write critically. They use the written word to express themselves electronically in virtual seminar room discussions, communicating through emails and in the preparation of learning activities.

All students must have access to a computer (either PC or Mac), a USB port headset and an Internet Service Provider, with a DSL connection recommended. Web-cam transmission capability is also required. As technology is continually being updated, before purchasing a computer, please contact the Admissions Coordinator for up-to-date information on hardware and software required.

At the Midwifery Institute of Philadelphia University, instruction is provided through the use of course management software that delivers the curriculum and facilitates faculty/student discussion, communication and electronic submission of assignments. Orientation to the software is provided prior to and during the online orientation to the program. Readings and frequent interaction with faculty and classmates complement electronic courses, which include problem-based learning. Experienced faculty members work closely with students and are accessible by e-mail or telephone. Students can access library resources online through the Gutman Library website.

Our computer environment is intuitive and easy to use. However, students must have basic computer skills, including familiarity with Windows-based applications, word processing and Internet use. During orientation students learn how they will use the computer during their program of study and how they will communicate with both their faculty and classmates. Students with minimal computer skills are encouraged to enroll in a computer course prior to orientation.

#### *Technical and Professional Standards*

For admission to the program, candidates must:

- Be self-motivated learners, have good study habits and be able to organize life commitments to set aside sufficient time for study and learning. We estimate this requires approximately 30-40 hours a week for full-time students, in an environment conducive to study.
- Possess the emotional maturity and stability to approach stressful clinical situations in a calm and rational manner.
- Have the ability to effectively communicate with women and families from a wide diversity of cultural and socioeconomic backgrounds in an empathetic and sensitive way.
- Have well-developed oral and written communication skills.
- Have the ability to make independent clinical decisions within the scope of midwifery practice and within the guidelines for relationships established with collaborating health care providers.
- Display strong ethical integrity consistent with academic expectations and the American College of Nurse-Midwives (ACNM) Code of Ethics.
- Have sufficient mental abilities and physical capabilities, including but not limited to the following areas of sensory function (vision, hearing and touch sensation), eye hand co-ordination, neurologic and muscular coordination and control to competently perform physical assessments and the technical procedures necessary for midwifery practice.

#### *Clinical Preceptorship*

Initial clinical experiences occur in the office providing prenatal, well-woman and primary care approximately two days per week for two semesters. During the student's final two semesters, clinical experience is full scope and adds all phases of labor, birth, postpartum and newborn care. A student may spend up to 40 hours per week in clinical during the final semester. Only part-time employment should be considered while undertaking this full-time program.

#### *Clinical Requirements*

Students are required to meet and document the following practicum requirements during their clinical experience: 10 preconception care visits; 40 new antepartum visits; 130 return antepartum visits; 40 labor management experiences; 40 births; 20 postpartum visits (0-5 days); 40 newborn assessments; 10 breast-feeding support visits; 20 postpartum visits (4-8 weeks); 40 primary care visits; 30 family planning visits; 30 gynecologic care visits; 20 peri/postmenopausal visits. Students must develop their critical thinking and clinical skills to a safe, beginning level of competency during their clinical practicum. A Declaration of Safety, indicating a student has achieved beginning level of competency necessary for

entry into practice, must be signed by the clinical preceptor prior to program completion and in order to sit for the national certification exam given by the American Midwifery Certification Board (AMCB).

*Insurance Coverage*

Students must show proof of coverage for malpractice liability prior to starting clinical rotations. This insurance is readily available to student midwives through the ACNM. Cost varies year to year and by location. Applicants should ask for current costs during the admission process and know these may change by the time of purchase. Students are responsible for their own medical and dental care while enrolled in the program, and for informing the University they have coverage or they will be automatically placed on the university student health plan. Students may need to submit to, and be financially responsible for, any reasonable health screening that is required by a clinical agency beyond that required by the Midwifery Institute of Philadelphia University.

*Accreditation and Certification*

The Master’s in Midwifery program is accredited by the Accreditation Commission for Midwifery Education (ACME). Their mailing address is: ACME, 8403 Colesville Road, Suite 1550, Silver Springs, MD 20910-6374, (240) 485-1800, [www.acnm.org](http://www.acnm.org).

Upon successful completion of the program, graduates will receive an M.S. in Midwifery and will be eligible to take the national certification examination for midwives offered by the AMCB. Completion of the program prepares graduates to work in all practice settings.

**Course of Study: Master’s of Science in Midwifery (Fall and Spring starts, varies slightly)**

SEMESTER 1

	Online Orientation To The Program (Scheduled just prior to first term courses)	0
CMW604	Advanced Reproductive Anatomy Physiology	3
CMW605	Professional Issues	2
CMW606	Health & Lifestyles	2
CMM699	Advanced Physical Assessment	3

SEMESTER 2

CMW607	Health care of Women I	4
CMW638	Advanced Pharmacology I	2.5
MMW 712	Introduction to Health Policy	3
On campus session to include the following: Skills Workshops and Technical Competence Validation		
CMW602	Interviewing & Counseling	0.5
CMW613	Embryology & Genetics	1

SEMESTER 3

CMW610	Antepartum Care	4
CMW612	Postpartum/Newborn Care	2.5
CMW631	Clinical I: Well Woman and Maternity Care 1	2

SEMESTER 4

CMW611	Intrapartum Care	4
CMW 620	Health care of Women 2	2
CMW639	Advanced Pharmacology II	0.5
CMW632	Clinical II: Well Woman and Maternity Care	3
MMW720	Critical Inquiry 1	3

On Campus Session To Include The Following:

Skills workshops and technical competence validation

CMW640	Preparation for Full Scope Midwifery Practice	1
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SEMESTER 5

MMW 721	Critical Inquiry 2	3
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CMW619	Perinatal Complications	4
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CMW633	Clinical III: Full Scope Midwifery Care 1	4
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SEMESTER 6

CMW634	Clinical IV: Full Scope Midwifery Care 2	5
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*Elective (choose one):*

MMW 722	Introduction to Administration in the Clinical Setting; or	3
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MMW 723	Advanced Clinical Practices; or	3
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MMW 724	Introduction to Teaching Methods; or	3
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MMW 725	Issues in Reproductive Health in Nations	3
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Optional

MMW931	Thesis	3
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The thesis is optional. Students electing to complete a thesis will complete a research project based on the research question they developed in MMW 721, Critical Inquiry II. The thesis option will be attractive to students interested in doctoral studies or additional research experience.

TOTAL PROGRAM CREDITS:

DIDACTIC CREDITS           48

CLINICAL CREDITS           14

TOTAL CREDIT HOURS   62 (65 with Thesis)

*Admission to the M.S. in Midwifery Program*

*Academic Calendar*

Classes are admitted twice a year in the fall and spring. See the Philadelphia University Midwifery Institute website for application deadlines ([www.philau.edu/midwifery](http://www.philau.edu/midwifery)).

*Requirements*

Each applicant is evaluated individually. Candidates are expected to meet the following criteria for admission:

- Submit a professional resume.
- For the Certified Nurse-Midwife pathway, a candidate must be a registered nurse currently licensed in the state where employed.

- For the Certified Midwife pathway, a candidate must complete all pre-requisites prior to enrollment. See the Philadelphia University Midwifery Institute website for prerequisites ([www.philau.edu/midwifery](http://www.philau.edu/midwifery)).
- Hold a baccalaureate or higher degree in any discipline with a grade point average (GPA) of 3.0 or higher.
- Have an interview and a written agreement with a midwifery preceptor at a clinical site.
- Own a computer and have Internet access.
- Submit two letters of reference.
- Submit official transcripts from all undergraduate and graduate courses/institutions.
- Submit a brief essay, per guidelines, using a word-processing program.
- Submit a writing sample – a review of an evidenced based research article in a recent Journal of Midwifery and Women’s Health
- Take the Graduate Record Examination (GRE).
- Complete an interview (in-person/telephone) with a program faculty member.
- Submit evidence of completion of a three-credit undergraduate statistics course.

### *Transfer of Credits*

Students seeking to transfer credit from another ACME accredited midwifery education program into the Master’s in Midwifery course of study will have their evaluated on an individual basis.

### *Other Program Options*

Philadelphia University also offers an ACNM-accredited Post-Master’s Certificate Program in Midwifery, a MS in Midwifery Completion program, a re-entry to practice program for CNM/CMs who have been out of clinical practice for a number of years and the CM Pathway courses to the MS in Midwifery.

### *CM Pathway*

The CM pathway to our existing midwifery education program is for qualified individuals prepared at the bachelor’s level who want to become midwives. After successful completion of the program, graduates will be able to sit for the American Midwifery Certification Board (AMCB) exam to become certified midwives (CMs).

Individuals who may have limited or no experience in health care practice have unique learning needs that are addressed before beginning the MS in Midwifery program. Students entering through the CM pathway must complete all pre-requisite courses required for admission and pass 3 courses (CMW 635, CMW 636, CMW 637) as prerequisites before they segue way into our existing 62 credit midwifery education program. As this catalogue goes to press, the CM credential is legally recognized to practice in the following states: New York, New Jersey, Delaware and Rhode Island. Other states are currently considering licensure for the CM.

### **Post-Master’s Certificate Program in Nurse-Midwifery**

This program is available for those who currently hold a Master’s degree in a clinical health care discipline and wish to practice midwifery. It consists of the 50 credits at the CMW 600 level in the MS in Midwifery course of study. Depending on previous professional practice and education, the student may be eligible to challenge selected courses based on prior education and current professional experience. This should be discussed with the coordinator for admissions. See Master’s in Midwifery section for full details.

### **M.S. in Midwifery Completion Program**

This program is designed for CNM/CMs whose basic midwifery education was at the certificate level who now wish to further their education in midwifery at the Master's level. Potential students must hold the CNM/CM credential or be enrolled in a current program accredited or pre-accredited by ACME. At Philadelphia University, we have planned the program to accommodate the work demands of midwives' clinical practice. The program involves extensive reading and participation in online discussions and learning activities. The richness and diversity of experience that each MS Completion student brings to the discussions has been a source of inspiration for the faculty and students alike. This degree completion program is designed for busy practicing midwives without relocating or incurring excessive expenses.

#### *Structure of the Program*

The MS in Midwifery Completion Program consists of 36 graduate credits. Students are awarded up to 24 credits from their Accreditation Commission for Midwifery Education accredited education after individual evaluation of the transcript. The remaining credits will be taken through Philadelphia University and will include three required courses and one elective. (See 700 level courses above.)

#### **Admission to the MS Completion Program**

The Admissions Committee considers a variety of criteria in making an acceptance decision. To be eligible for admission to Philadelphia University, you must follow the admissions procedures described above and have the following credentials:

- Academic Background: A baccalaureate degree from an accredited institution with a minimum cumulative grade point average of 3.0
- Educational preparation as a CNM/CM with evidence of graduation from an ACME accredited program with a minimum cumulative grade point average of 3.0. SNM/SMs currently enrolled in an accredited ACME program that does not offer the MS may also enroll in the program, but will not receive the MS degree until their certificate program has been successfully completed.
- All applicants must have completed a three-credit undergraduate course in statistics prior to admission
- Personal Statement
- Applicants write a short personal statement (criteria available on the website)- this essay will be examined for written communication skills, motivation and time for graduate education
- Professional Resume
- Applicants submit an updated resume, which highlights their background and experience
- Standardized Test Scores
- The Graduate Record Examination (GRE) or Miller Analogies Test (MAT) is recommended but not required. Those applicants who have completed a prior master's degree do not need to take a standardized admissions test
- Two Letters of Reference (recent academic or professional)
- These letters attest to the applicant's abilities, communication skills and motivation.
- Phone Interview with a faculty member

*Advanced Placement Options for Nurse Practitioners, Physician's Assistants and Foreign Educated Midwives*



The Advanced Placement Option (APO) is an individualized program of study for qualified candidates with previous professional preparation in an advanced nursing practice, or as a physician's assistant or midwife. APO students may be eligible to challenge selected portions of the midwifery education program by demonstrating competency according to APO policies. The purpose of the APO is to assure sound preparation in midwifery, while minimizing repetition of learning activities for knowledge and skills already attained. Part-time study or accelerated options may be planned according to class schedules, availability and learner preferences.

#### *Eligibility Criteria for the Advanced Placement Option*

- Applicants must meet all of The Midwifery Institute of Philadelphia University's admissions requirements
- Documentation of successful completion of a nurse-practitioner, physician's assistant or midwifery program, in an institution accredited by the recognized regulatory body for the jurisdiction where the institution is located. NP programs must meet the USA federal accreditation standards. Graduates of midwifery education programs located outside of the USA must have their transcripts reviewed by a USA credentials evaluation service
- Applicants must not have a history of professional credential revocation
- A TOEFEL score of 500 or greater, if English is not the applicant's first language, is required.
- A minimum of two (2) years of experience in advanced clinical practice as a nurse-practitioner, physician's assistant or midwife within the previous ten (10) years, or graduation from a nurse-practitioner, physician's assistant or midwifery education program within the previous three (3) years
- Foreign Educated Midwives (FEMS) who are RNs seeking education leading to the CNM credential, must have work experience as an RN in the U.S., preferably in the labor & birth area, for at least one (1) year in the preceding five (5) years
- FEMS who are seeking education via the CM Pathway to the CM credential must have midwifery work experience for at least 1 year in the past 5 years

### **MASTER OF SCIENCE IN OCCUPATIONAL THERAPY**

Program Director: Wendy Krupnick, Ph.D., M.B.A., B.S., OTR/L

Campus Location: Main Campus; classes held eight weekends during each semester: Between class sessions, students complete assignments and participate in online learning activities.

Students will be admitted into this program for entrance in the fall semester only.

#### *Mission*

The Occupational Therapy (OT) Program's mission is to develop competent, reflective and ethical occupational therapists who possess a commitment to professionalism and lifelong learning. In keeping with the University mission to prepare graduates for successful careers in an evolving and interconnected world, the OT Program incorporates interdisciplinary learning and collaboration to enable graduates to practice in diverse environments and changing service-delivery contexts. The curriculum is organized around three themes that reflect the program's philosophy: Enabling Participation through being client-centered and grounded in the person-environment-occupation fit; Applying Evidence and Clinical Reasoning to enhance practice; and Fostering Collaboration and Innovation in order to contribute to our clients' well-being and quality of life.

### *Program Learning Outcomes*

The Philadelphia University entry-level master's degree in occupational therapy curriculum is designed to prepare competent, reflective and ethical occupational therapists whose practice philosophy is both client-centered and occupation-based, and who possess a commitment to professionalism and lifelong learning.

Graduates from the Occupational Therapy program will demonstrate the ability to:

- Provide occupation-based and client-centered care by competently applying and adapting the occupational therapy process
- Establish effective and therapeutic relationships with clients, their caregivers and families
- Demonstrate respect for people's beliefs around health, illness and disability
- Apply core theory, knowledge, skills, and critical thinking to inform practice
- Locate, evaluate and apply research findings to promote best practice in occupational therapy
- Work collaboratively with clients, caregivers and members of the professional team to implement programs and services that enable health and participation
- Demonstrate the attitudes, behaviors and responsibilities associated with being a health professional
- Develop innovative tools, programs or services to promote quality of life

### *Program Description*

Individuals whose lives are affected by illness, injury or developmental delay can attain their fullest measure of independence and life satisfaction through expert intervention by an occupational therapist. By helping people to build skills and enhancing how they interact in their environments, occupational therapists help people to function and live life to its fullest.

The entry-level master's degree program is offered in a weekend-format, that features in-class and online instructional methodologies to help students to become competent entry-level therapists. Coursework builds on the strengths of the University in the areas of design and health sciences, to provide students with unique perspectives on the delivery of occupational therapy services.

The M.S. in Occupational Therapy prepares professionals to be skilled in the principles of environmental assessment and analysis as they apply to human occupation and adaptation. The program is grounded in client-centered values and evidence-based practice approaches. The curriculum stresses the acquisition of an in-depth understanding of health care issues; cultural perspectives; environmental demands; physical, developmental and psychosocial functions; and occupation-based interventions. Key learning activities and course assignments require student collaboration with design, architecture and fashion students, as well as practicing health care professionals and community agencies.

One of the unique aspects of the master's program is the student's two-year involvement with a client living in the community. Each semester students complete course assignments with their clients to better understand the client's experience and occupational adaptation issues. Students incorporate this information into the Master's Portfolio project where they reflect on and chronicle their learning and accomplishments from classroom, fieldwork and portfolio client experiences. The Master's Portfolio project culminates in a capstone presentation to practicing occupational therapists and representatives of other communities of interest.

Consider some of the following features of the graduate program:

- First 22 months of program are conducted in weekend format on campus; program may be completed within 3 academic years, including Level II Fieldwork.
- Students complete multiple Level I Fieldwork experiences in a range of practice settings.
- Students are engaged in online clinical reasoning courses during Level II Fieldwork.
- Students can choose to participate in the voluntary mentorship program where they are linked, through the Internet, with practicing occupational therapists who serve as their professional mentors throughout the program.
- The program focuses on educating practitioners to use evidence to support practice decisions, to work independently and creatively; and to nurture a commitment to lifelong professional development.
- The program is designed for adult learners who are self-directed and good time managers.
- Students are exposed to job opportunities in a wide variety of settings: hospitals, long-term care facilities, psychiatric facilities, hand clinics, rehabilitation centers, pediatric hospitals, schools, home care agencies and other community-based settings.

The Occupational Therapy Program curriculum is based on a frame of reference that is humanistic and holistic in nature, and which emphasizes optimal functioning throughout the life span. The program is designed to prepare strong entry-level practitioners who employ an evidence-based practice approach with the capacity for creative analysis and sound critical thinking.

#### *Unique Program Requirements*

Successful students in this type of learning program are self-motivated and disciplined. The program will involve extensive reading and off-campus learning activities. Students must enjoy learning through a visual medium. In addition, students must have an ability to express themselves well in written format and a desire to increase their abilities to think and write critically.

All students must have daily access to a computer with camera or web-cam and the internet. It is highly recommended that students also have access to a headset with microphone.

#### *Prerequisite Course Requirements*

(COMPLETED WITHIN LAST TEN YEARS)

Course	Credits
Anatomy and Physiology I (with Laboratory)	4
Anatomy and Physiology II (with Laboratory)	4
Science (Physics recommended)	4
Developmental Psychology or equivalent (Lifespan)	3
Abnormal Psychology or equivalent	3
Statistics	3
Sociology/Anthropology/Cultural Studies I or equivalent	3
Other: Basic word-processing and presentation skills	
TOTAL CREDIT HOURS: 24 Credits	

#### *Core Curriculum*

The coursework is sequenced in a planned progression in order to build upon and develop knowledge and skills at increasing levels of complexity, competence and integration. Upon the completion of the

second year, students must participate in two full-time, Level II Field work affiliations. Note: A felony conviction may affect a student's ability to be placed at a fieldwork setting.

OCC610	Portfolio Seminar	1
OCC611	Foundations for Practice	3
OCC613	Functional Anatomy	4
OCC 616	Assistive Technology Design	1
OCC621	Occupational Competence	3
OCC 623	Applied Neuroanatomy	4
OCC625	Clinical Skills A	1
OCC 626	Evidence-Based Practice	3
OCC 635	Clinical Skills B	1
OCC 645	Clinical Skills C	1
OCC735	Level I Fieldwork A	1
OCC738	Psychosocial Interventions	5
OCC 741	Interpersonal Relations & Groups	3
OCC745	Level I Fieldwork B	1
		3
OCC 748	Assessment & Intervention: Adults	5
OCC 751	Professional Issues and Trends	3
OCC 754	Environmental Dimensions of Occupation	3
OCC 755	Level I Fieldwork C	1
OCC 757	Innovative Practice in OT	3
OCC 758	Assessment and Intervention: Children & Youth	4
OCC 765	Level I Fieldwork D	1
OCC766	Older Adults: Enabling Participation	2
OCC 768	Spec Practice: Upper Extremity Rehabilitation	3
OCC 770	Practice Platform	2
OCC771	Level II Fieldwork	3
OCC775	Clinical Reasoning I	1.5
OCC781	Level II Fieldwork B	3
OCC 784	Mastery	1
OCC785	Clinical Reasoning II	1.5
TOTAL CREDIT HOURS: 72 Credits		

#### *Admissions Criteria*

Any individual who has or is about to receive a bachelor's degree from an accredited college or university is eligible to apply. The Graduate Program in Occupational Therapy leading to the Master of Science is designed to accommodate students from all undergraduate disciplines. Students in the Occupational Therapy Program will be selected on a competitive basis from candidates submitting complete applications with all required supporting materials.

- Academic Background: A bachelor's degree from an accredited institution with a minimum cumulative grade point average (GPA) of 3.0, and completion of all prerequisite foundation coursework with a minimum average 3.0 GPA is required. Candidates may apply for consideration prior to completion of all prerequisite requirements as long as a reasonable plan

for completion of required coursework prior to entrance into the program is delineated. All prerequisite foundation courses must be completed prior to matriculation in the program.

- Two Letters of Reference: (one academic and one professional). These letters should examine the applicant's abilities, communication skills, motivation, interpersonal skills and emotional responsibility.
- Personal Essay: Students should write and submit a career goals essay with their application materials (approximately 500 words). The essay will be examined for written communication skills, knowledge of the occupational therapy field, and motivation for the profession.
- Standardized Test Score
- Students will need to submit results of either the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) with their application. Candidates' application packets will be reviewed after the GRE or MAT scores are received by the university.
- Professional Resume: Students must submit a resume that highlights their background and experience. Faculty believe that enrollment of students with varied cultural, geographic, academic and employment backgrounds enriches the learning experience and helps sensitize Occupational Therapy Program students to the unique characteristics of the diverse patient populations they will work with as health care providers.
- Clinical Observation Hours: Students should submit documentation of 20 hours of clinical observation under the supervision of an occupational therapist before beginning the professional program. Applicants are encouraged to complete clinical observation hours as early as possible.

#### *Acceptance Classifications*

Students may be admitted to this program under one of the following acceptance classifications:

- *Full Acceptance*: Students who have met all admissions requirements with satisfactory performance as judged by the OT Program's Admission Committee are granted full acceptance. Full acceptance is granted only when the student's file is complete, and all the program-specific requirements for entry have been met. A complete file includes official copies of standardized test scores, official copies of academic transcripts, two recommendations, a completed application, a personal essay and a resume.
- *Conditional Acceptance*: Students may be offered a conditional acceptance classification when a student's file is missing evidence that he/she has successfully completed all prerequisite coursework. Prior to admission under this category, students must show evidence of registration for all outstanding prerequisite courses. Students will not be allowed to take any courses in the program prior to completion of all prerequisite coursework. Upon successful completion of all prerequisite course requirements, students must apply to the Office of Graduate Admissions for a change in admission status.

All students must be fully accepted into the Occupational Therapy Program before they can enroll in any Occupational Therapy courses.

#### *Accepted Student Requirements*

Students in the Occupational Therapy Program are expected to fulfill the following requirements during their student experience at Philadelphia University.

Participation in clinical and fieldwork experiences is a required part of the curriculum and a requirement for graduation. Many settings require students to be fingerprinted, undergo a drug screening and/or gain clearance from the PA Sex Offender Registry. Students are responsible for the costs of these processes, as well as for transportation arrangements and costs associated with fieldwork experiences. Information regarding how to meet these requirements is provided by the program. Note: Clinical and fieldwork sites may deny a student's participation in the clinical or fieldwork experience because of a felony or misdemeanor conviction, failure of a required drug test or inability to produce an appropriate health clearance, all of which would result in delayed graduation or, in the inability to graduate from the program.

Students are expected to obtain materials and/or complete documentation required for Fieldwork:

- Health Clearance (by August, New Student Orientation)
- Annual physical examination (use PhilaU Student Health Medical Record Form)
- Annual update of immunizations according to fieldwork site requirements
- Annual proof of active health insurance coverage
- Legal Clearance: Annual criminal background check ([www.CertifiedBackground.com](http://www.CertifiedBackground.com)) and annual child abuse history clearance
- CPR certification (required prior to Level II Fieldwork)

Students are expected to maintain professional organization memberships (highly recommended):

- Philadelphia University Student Occupational Therapy Association (SOTA)
- American Occupational Therapy Association (AOTA)
- Pennsylvania Occupational Therapy Association (POTA) (or other state OT association)

#### *Accreditation and Certification*

The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. ACOTE's phone number is 301.652.2682.

Graduates of the program are eligible to sit for the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. It should be noted that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

#### *Occupational Therapy Program Academic Standards*

The Occupational Therapy Program admission criteria are designed to select candidates who are most likely to succeed both in the University academic environment as well as in OT professional practice. While the Program faculty is dedicated to assisting students in their professional education, the student also has responsibilities. Students enrolled in the program must demonstrate achievement in academic and clinical competencies necessary for professional practice, and meet academic standards consistent with graduate school criteria. Students must also demonstrate effective professional behavior as detailed in the Standards of Professional Behavior (see OT Student Handbook). In order to remain in good academic standing, students must meet the following standards. These academic standards are in

addition to the university academic standards as described in the Graduate Catalog and on the Philadelphia University website.

### *Retention and Progression*

Students must complete all Level II Fieldwork within 15 months following completion of the didactic portion of the program. The maximum time for completion of the degree program is 4.5 years from the date of first enrollment. Students who have not earned the graduate degree during this period will have their academic records reviewed and may be asked to meet additional requirements in order to graduate.

#### 1. Grade Point Average

A minimum overall 3.0 grade point average (GPA) in Occupational Therapy coursework must be maintained each semester. A semester GPA below 3.0 will result in probation for the following semester.

If the semester GPA is below 3.0 for two consecutive semesters, the student will be dismissed from the full-time program.

A student must attain a minimum overall 3.0 GPA prior to enrolling in Level II fieldwork courses.

A student must achieve a minimum overall 3.0 GPA to be eligible to graduate.

A student may not receive more than two grades below B- while in the OT Program.

A grade below "C" (2.0) is considered failing. While the grade of "C" is regarded as a minimum passing grade, it is considered unsatisfactory performance. Students who earn a "C" grade in a core course must decelerate, and repeat the course before proceeding in the full-time program (see Deceleration below). Students who are unable to earn a minimum "B" (3.0) in a repeat course will be dismissed from the program. A course can be repeated only once, and the student must achieve a "B" (3.0) grade on the second attempt.

If a grade of "F" or "NC" is obtained in a non-fieldwork course, the student will be dismissed from the program.

### *Competency Grading*

A. Each student is expected to pass every competency on the first attempt with a minimum passing grade of 80%. If unsuccessful, the student will be allowed one retake of the competency; the highest grade that can be earned will be 80%.

B. Students must earn a competency grade average of 80% or higher within each course. Students who are unable to earn the minimum 80% average must enter into a remediation program defined by the course faculty.

C. Each student is expected to demonstrate proficiency in all safety items in order to successfully pass the competency.

### *Fieldwork*

Students must receive satisfactory reports and evaluations from all fieldwork educators to receive fieldwork credit ("CR").

If a grade of "NC" (no credit) is obtained in a fieldwork, the student must develop a written plan of self-correction prior to being placed in another fieldwork. A fieldwork may be repeated only once, and the student must achieve a "CR" (credit) grade on the second attempt. If a student receives a grade of "NC" in two fieldwork courses, the student will be dismissed from the program. The decision to permit a student to repeat fieldwork is dependent on fieldwork educator verbal or written reports about student

behavior with respect to adherence to site regulations, site schedule, ethical standards of conduct or engagement in behavior that puts patient/ client safety at risk.

Students receiving a “NC” grade, including “W” (withdrawal) in fieldwork will be placed on probation. The student must re-register and repeat the fieldwork in order to progress in the program. Repetition of a fieldwork could delay graduation. Withdrawal for medical or personal reasons, and approved by program faculty, will not result in probation.

A student must earn a grade of “CR” in all fieldwork in order to graduate.

### *Probation, Suspension and Dismissal*

1. Probation -- students whose academic records include one or more of the following will be placed on academic probation:
  - A student who has a cumulative grade point average below 3.0. for one semester.
  - A student who receives a grade of “C+” or “C” in any course will be placed on probation for the next semester. Probation for two consecutive semesters will result in dismissal. Probation for any three semesters will result in dismissal.
  - A student who receives verbal or written reports from fieldwork educators indicating non-adherence to site regulations, site schedule, ethical standards of conduct or engagement in behavior that puts patient/ client safety at risk.
  - A student who violates the OT Program’s Standards of Professional Behavior or AOTA Code of Ethics and Ethic Standards.
2. Deceleration: Deceleration means that the student may not progress in the full-time program.
  - Students decelerate when they receive a “C” (2.0) or “NC” in core courses (Functional Anatomy, Applied Neuroanatomy, Clinical Skills A, B, & C, Evidence-Based Practice Assessment & Intervention courses (Adult, Children & Youth, and Psychosocial Interventions) or their equivalent. Students must repeat courses and earn a minimum “B” (3.0) or “CR” in order to proceed in the program. Students can decelerate once.
  - Since the program is a lock-step curriculum, courses that were not successfully completed cannot be repeated until the following year. A second deceleration results in dismissal.
  - Repeated violations of the OT Program’s Standards of Professional Behavior or AOTA Code of Ethics and Ethic Standards are also grounds for suspension.
3. Dismissal -- students whose academic records include one or more of the following will be dismissed:
  - Student fails to meet minimum academic standards listed above.
  - Student receives a grade of “F” or “NC” in a non-fieldwork course.
  - Student fails or receives “NC” in two fieldwork courses.
  - Student decelerates once and receives a “C” in a subsequent semester.
  - Student placed on probation for two consecutive semesters or any three semesters.
  - Student repeats a course and does not earn a minimum “B” (3.0) grade.
  - Student displays egregious conduct that violates professional and/or legal standards, and/or University regulations regarding academic and professional conduct.



4. **Reentry:** Students who are dismissed from the OT Program for academic conduct or any other reason are not typically readmitted. In special circumstances, dismissed students may be considered for re-entry. A student who is academically dismissed from the OT Program may apply for readmission only after a period of at least one year. To be considered for re-entry students must have developed and implemented an action plan that would facilitate successful academic performance. Refer to the re-entry policy in the OT Program Student Handbook for further information.
5. **Withdrawal:** Students who withdraw from the OT Program may have their records reviewed for possible readmission by program faculty. Readmission will be determined by the faculty based on this review and any additional criteria required at the discretion of the faculty. Refer to the University catalog for further information regarding procedures.

### *Level II Fieldwork*

Certification for Level II Fieldwork -- students must have demonstrated:

- 1) the ability to meet the academic and program standards outlined in the OT Student Handbook, and
- 2) effective interpersonal communication, professional behavior and judgment necessary for the field setting to be recommended by the faculty for fieldwork.

By the terms of the University's contractual agreement with fieldwork sites, only students who have satisfactorily completed the requisite professional courses and demonstrate safety and proficiency in all competencies will be placed in fieldwork.

Faculty will formally review all students' progress at the end of the spring semester of the second year of professional coursework (or equivalent) to ensure that students are demonstrating mastery of material and are ready for Level II fieldwork. This appraisal includes a review of students' grades, clinical skills and professional behavior. Faculty retains the final decision to approve students for fieldwork placements.

Students who frequently display unprofessional behavior and/or judgment, or who are unable to address professional behavior concerns that have been identified by faculty, will be required to appear before a sub-group of the OT Program faculty that includes at a minimum the fieldwork coordinator, program director and faculty advisor. This faculty group may impose sanctions which can include probation, suspension or dismissal from the program, and/or delay the student from engaging in the fieldwork portion of the curriculum.

Students must successfully complete Level II fieldwork within 15 months beyond the date of completion of the didactic portion of the program.

Failure to complete a fieldwork or having to be removed from a placement may result in a student's dismissal from the program. Students who need to repeat more than one Level II fieldwork due to unsatisfactory performance will be dismissed from the program.

## **MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES**

Program Director: Lawrence Carey, PharmD

Campus Location: Main Campus, Hayward Hall, Suite 224

Full-time, day program. Students admitted for entrance annually in July only.

### *Mission*

To provide students with the foundation of knowledge, technical skills and critical thinking necessary to competently perform the functions of the physician assistant profession in an ethical, empathetic manner working with a licensed practicing physician. A secondary focus is to prepare students to provide comprehensive medical services to diverse under-served patient populations in inner-city and rural locations.

### *Program Learning Outcomes*

Graduates of the Physicians Assistance Program will:

- Identify, perform, and document correct components of medical histories, and correctly perform appropriate procedures in a variety of clinical environments.
- Practice medicine in an ethical, empathetic and humanistic manner.
- Collaborate with other health care providers to ensure the optimal provision of care to patients.
- Differentiate and perform appropriate physical examination techniques, define and assess monitoring parameters and delineate treatment plans for their patients.
- Demonstrate proficiency in medical writing and the ability to research a clinically-related question or topic.
- Successfully pass the Physician Assistant National Certifying Examination (PANCE).

### *The Profession*

A physician assistant, or PA, is a qualified medical professional who practices medicine under the supervision of a licensed physician. PAs provide a wide variety of medical services traditionally performed by physicians. The concept for the profession originated in the early to mid-1960s as a way to enhance the provision of medical care to people residing in medically underserved areas. The care of the underserved remains an ongoing goal of the profession.

Physician assistants work in all 50 states, Guam and the District of Columbia in a range of medical settings including physicians' offices, hospitals, clinics, emergency departments, military and Veterans Administration installations, nursing homes, industrial health centers and correctional institutions. They always work in conjunction with a physician and can have an array of responsibilities including medical history taking, physical examination, ordering or performing lab and other diagnostic tests, synthesizing data to make a proper diagnosis, developing a treatment plan, monitoring patient progress, providing health-related counseling and performing various procedures such as casting and suturing and assisting in surgery. PAs can prescribe medications in all states.

### *Program Description*

The Philadelphia University Physician Assistant Studies program is part of the College of Science, Health and the Liberal Arts. It is a comprehensive academic experience that stresses the practical application of current medical theory. All of the program faculty members are actively-practicing health care providers with a great depth of knowledge and experience. Students are exposed to the clinical environment throughout their education with patient contact even during the classroom or didactic portion of the program.

### *Program Specific Costs*

The typical student in the Physician Assistant Studies program will spend approximately \$3,000 on medical equipment, point-of-care equipment (such as a smartphone), books, malpractice liability insurance and other program-related fees for both professional phase years combined. This does not include tuition, housing, food, living expenses, travel costs, health center fees and graduation fees. All of these costs are listed elsewhere in the catalog.

The Physician Assistant Studies program is fully accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA). This program is available full-time, day only. The clinical or practical portion will involve some night and weekend hours.

#### *PA Program Technical and Professional Standards*

For admission to the program, candidates must:

- Have the academic ability to learn a large volume of technically-detailed information and be able to synthesize and use this data to solve complex clinical problems. This information must be acquired in a short and intense period of study that requires well-developed study skills and a high level of motivation and may require considerable personal and financial sacrifice;
- Possess the emotional maturity and stability to approach highly stressful human situations in a calm and rational manner;
- Have the ability to effectively communicate with ill patients from a wide diversity of cultural and socioeconomic backgrounds in an empathetic and sensitive fashion;
- Have well-developed oral and written communication skills;
- Have comfort with the role of a dependent practitioner operating under the supervision of a licensed physician, while simultaneously feeling comfortable with the large amount of responsibility that goes along with the delivery of patient care in sometimes remote locations;
- Display strong ethical integrity consistent with working as a health care professional;
- Have sufficient physical abilities in the areas of sensory function (vision, hearing and touch sensation), hand-eye coordination, and neurologic and muscular coordination and control to competently perform the technical activities that are a critical part of the program and profession, including:
  - Physical examinations, which include visual inspection, listening to heart and lung sounds with a stethoscope, examination by touch to gather information such as skin temperature and texture and other maneuvers;
  - Performance and interpretation of diagnostic studies such as blood tests, EKGs and X-rays;
  - Surgical assisting, which can involve activities such as control of bleeding and suturing (wound closure by placing stitches); and
  - Performing common procedures such as applying casts, suturing, cardiopulmonary resuscitation (CPR), venipuncture (placing needle into a vein to collect a blood sample) and starting an intravenous access line.

#### *Curriculum*

The program is 25 months of continuous study and includes the didactic level consisting of three semesters of classroom and laboratory work in basic and applied medical science, and the clinical level consisting of six rotations and four preceptorships (for a total of 10 clinical experiences) at a variety of clinical sites such as hospitals and medical offices. The first semester of the didactic level begins in mid-July of each year. Students must complete all didactic-level courses before they can enter the clinical level.

### *Overview of Clinical Training*

Upon successful completion of the didactic-level courses, the PA student proceeds into the clinical-education level of the program. The PA student will spend approximately 12 months in clinical rotations and preceptorships. This is divided into 10 five or six-week blocks.

### *Clinical Rotations and Preceptorships (6 credits each)*

The required clinical rotations are five or six week blocks in the areas of internal medicine, pediatrics, surgery, psychiatry/mental health, women's health and emergency medicine and are designed to expose the PA student to patient care in a variety of settings. The student is directly involved with the evaluation and management of patients to the extent that the clinical preceptor or supervisor is comfortable with the level of knowledge and skills of the PA student. Typically, the student spends at least 40 hours per week in the clinical setting, attending to patients and partaking in continuing medical-education seminars.

Preceptorships are designed to enhance the PA student's knowledge, technical skills, clinical judgment and confidence in the evaluation and management of common medical problems. One of these must be completed as a 10 week (two five week blocks) experience in an ambulatory, primary-care setting such as an outpatient family practice office or center.

The remaining preceptorship experiences include the Primary Care Selective Medicine Block in a medically-related specialty such as family, internal or geriatric medicine, and the clinical elective. During the elective, students can spend more time in one of their rotation specialties or gain experience in other settings such as neonatology, HIV, correctional medicine, urology, orthopedic surgery, cardiothoracic surgery and others. The student will spend at least 40 hours per week in each of these experiences.

Students must have access to a personal computer. Students will be given an Internet account from the University and access to the University academic computing labs.

### *Prerequisite Course Requirements*

Courses	Credits
Chemistry I	4
Chemistry II or Organic Chemistry	4
Biology I	4
Biology II or Genetics	4
Anatomy and Physiology I or Anatomy	4
Anatomy and Physiology II or Physiology	4
Microbiology	3 or 4
Introduction to Psychology	3
English Composition	3
One college-level math or statistics course	3
Three-months of patient care or human service experience	
Medical Terminology	1

Note: Additional psychology and chemistry courses, and a genetics course are strongly advised and highly desirable.

Due to changes in science and the importance of science prerequisites as a basis for the study of PA curriculum, all science courses should be no more than seven years old. A waiver of this limit can be given to individuals who have worked in a scientific field on a regular basis, or who have completed several current higher-level science courses. Candidates must write a letter to the PA Program Admissions Committee requesting this waiver of the seven-year limit.

### Core Curriculum

#### YEAR ONE

##### *Summer Semester*

PASF507GR	Advanced Anatomy (Part A)	2
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##### *Fall Semester*

PASF507GR	Advanced Anatomy (Part B)	3
PASF513GR	Medical Physiology and Pathophysiology	3
PASF511GR	Applied Behavioral Science	3
PASF517GR	Medical History and Physical Diagnosis	5
PASF510GR	Medical and Professional Ethics	2
PASF521GR	Medical Genetics, Immunology and Microbiology	2

CREDIT HOURS: 20

(includes anatomy parts A and B)

##### *Spring Semester*

PAS611	Clinical Medicine	8
PAS612	Clinical Reasoning	2
PAS613	Pharmacology and Pharmacotherapeutics	4
PAS614	Emergency Medicine	3
PAS615	Laboratory Medicine	2

CREDIT HOURS: 19

##### *Summer 1 Semester*

PAS621	Clinical Disciplines Overview (Surgery, Pediatrics, OB/GYN)	6
PAS622	Pharmacotherapeutics Seminar	1
PAS623	Advanced Radiology/ECG Seminar	1
PAS624	Biomedical Literature and Research	3

##### *Summer 2 Semester*

1 Clinical Rotation	6
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CREDIT HOURS: 17

#### YEAR TWO

##### *Fall, Spring, Summer 1, and Summer 2 Semesters*

3 Clinical Rotations (6 credits each)	18	
4 Preceptorships	24	
Primary Care Selective	6	
Elective	6	
PAS771	Master's Comprehensive Experience**	

CREDIT HOURS: 57

### *Clinical Rotations*

PAS741	Internal Medicine Rotation
PAS742	Pediatrics Rotation
PAS743	Women's Health Rotation
PAS744	Psychiatry/ Mental Health Rotation
PAS745	Surgery Rotation
PAS746	Emergency Medicine Rotation

### *Clinical Preceptorships*

PAS759	Preceptorship IA: Primary Care 1
PAS760	Preceptorship IB: Primary Care 2
PAS763	Preceptorship IIA: Primary Care Selective
PAS764	Preceptorship IIB: Elective

TOTAL CREDIT HOURS: 113 Credits

\*\* Taken over entire clinical year

### *Application Procedure*

Philadelphia University is participating in the Centralized Application Service for Physician Assistants (CASPA). To apply for admission into the M.S. in Physician Assistant Studies program at Philadelphia University, please visit the CASPA website at [www.caspaonline.org](http://www.caspaonline.org). Application for admission will be accepted only through the CASPA service. Please refer to the Philadelphia University CASPA portal for specific information related to application deadlines.

You must request that official copies of your transcripts be sent directly to CASPA by the institution(s) attended. Student copies of transcripts or copies sent to CASPA directly by the applicant are not acceptable. Letters of reference should also be sent directly to CASPA from the person making the reference. Your GRE scores, however, should be sent directly to Philadelphia University, Office of Graduate Admissions by Educational Testing Services. Philadelphia University's reporting code is #2666. Once admitted the student must provide Philadelphia University with an original transcript of their bachelor's degree education. This is necessary to grant the MS degree, as the CASPA service maintains the original transcripts.

### *Admission Requirements*

The Accreditation Review Commission on Education for the Physician Assistant—Accreditation Standards for Physician Assistant Education: "The role of the physician assistant demands intelligence, sound judgment, intellectual honesty, appropriate interpersonal skills, and the capacity to react to emergencies in a calm and reasoned manner. An attitude of respect for self and others, adherence to the concepts of privilege and confidentiality in communicating with patients, and a commitment to the patient's welfare are essential attributes of the graduate PA."

Admission to the Physician Assistant Studies program is extremely competitive. Applicants are selected based on a committee's assessment of their ability to successfully complete the training and competently function in the role of the profession as defined by the ARC-PA as printed in the Accreditation Standards for Physician Assistant Education, the Commonwealth of Pennsylvania (as published in the Medical Practice Act) and the guidelines of the PA Studies Program. Candidates must have the physical, emotional and intellectual attributes necessary for success in this type of training.

### *Selection Criteria*

Students in the PA program will be selected from candidates submitting complete applications with all required supporting material to the Central Application Service of Physician Assistants (CASPA) at [www.caspaonline.org](http://www.caspaonline.org). The Physician Assistant Admissions Committee uses a variety of criteria to make admission decisions.

These can include:

- Academic experience including: a) previous college curriculum difficulty, institution, cumulative grades, science course grades and graduate study; b) college entrance exam scores such as GRE or MAT; and c) academic patterns such as most recent academic performance, credit load, withdrawals and incomplete courses. The Physician Assistant Studies Program requires a cumulative total GPA of 3.25 and a science-only GPA of 3.25 for admission; both criteria must be met to be considered for admission. Once admitted, the graduate school requires the maintenance of an overall GPA of 3.00.
- Health care or human service experience with consideration to type and duration. This can include both paid and volunteer experience;
- A personal essay that examines written communication skills, knowledge of the PA profession and motivation for the profession;
- Three letters of reference on prescribed forms that examine the applicant's abilities, communication skills, motivation, interpersonal skills and emotional maturity from those familiar with your professional or academic abilities, such as a professor or supervisor;
- The amount of prerequisite coursework the applicant has left to complete, along with the applicant's plan for completion. Students who have not completed all prerequisites prior to application can be admitted on a "conditional basis;"
- Personal interview- the most qualified applicants from the general applicant pool may be invited to come to the University for a personal interview. This interview attempts to ascertain an applicant's knowledge of the profession, motivation for pursuing a PA career, interpersonal and oral communication skills, compassion, problem solving abilities, preparation for the educational experience and dedication to providing care to the underserved;
- Diversity- the PA program believes that enrollment of students with a wide diversity of cultural, geographic, academic and occupational backgrounds enriches the learning experience and helps in sensitizing PA students to unique characteristics of diverse patient populations with whom they will work as health care providers.

## **JOINT DEGREE OFFERINGS**

### **OCCUPATIONAL THERAPY**

**Combined B.S. in Health Sciences/M.S. in Occupational Therapy**

**Combined B.S. in Psychology/M.S. in Occupational Therapy**

*The checksheets can be found in the checksheet portion of the catalog.*

Occupational therapy is a health care profession that helps people to maximize their functional independence after illness or injury, or develop the social and emotional skills necessary to participate fully in everyday life. Occupational therapists assist children with motor, social and learning needs to be successful in school activities and family life. They help adults to develop strategies to address the physical and emotional changes associated with rehabilitation or long-term health needs. Therapy frequently involves assisting individuals to relearn old skills, develop new ways of doing or adapt the environment to enable them to live satisfying and independent lives.

The Combined B.S. in Health Sciences/M.S. in Occupational Therapy or B.S. in Psychology/M.S. in Occupational Therapy Program is designed for students who know early on that they want to become occupational therapists. These dual degree programs allow students to seamlessly complete undergraduate and graduate degrees in less time than would be required to complete both of the degrees separately. Undergraduate courses and extra-curricular experiences provide students with a foundation to develop the knowledge, values and interpersonal skills needed for success as an occupational therapist.

During the first three years of undergraduate coursework, students complete major requirements for the bachelor degree, including College Studies courses and Occupational Therapy program prerequisites. Students who meet the graduate Occupational Therapy program progression criteria can matriculate into the master's program by enrolling in first-year Occupational Therapy graduate coursework during Year 4 of undergraduate studies. At the end of Year 4, students are awarded the bachelor degree in Health Sciences or Psychology and are eligible to participate in the May commencement ceremony. Upon completion of graduate Occupational Therapy program requirements in Year 6, the master's degree in Occupational Therapy will be awarded. Students receive their graduate degree in May and can participate in the May commencement ceremony.

For more information about the M.S. in Occupational Therapy, refer to the Graduate Programs section of the Catalog.

#### **Freshman Admission Option**

Freshmen applicants who demonstrate the following profile will be considered for admission to the program:

- Minimum overall high school grade point average (GPA) of 3.0
- Minimum combined SAT score of 1000 for Critical Reading and Math, or 22 on the ACT
- Four years of science – strongly encouraged

Transfer applicants should contact the Office of Admissions to discuss entry requirements.

#### **TRANSFER CREDIT FOR BS/MS IN OCCUPATIONAL THERAPY PROGRAMS**

Students can transfer with less than 30 credits. At least half of the Occupational Therapy graduate program's prerequisite courses must be completed at Philadelphia University, including one of the three science courses. Students may not transfer any of the program's prerequisite courses with grades lower than B-. These courses include Anatomy & Physiology I and II, Lifespan Human Development, Abnormal



Psychology, Statistics, two Sociology/ Anthropology/ Cultural Studies courses and Physics (non-calculus based).

**Internal Transfer Policy (for undergraduate students interested in transferring into the undergraduate portion of the BS/MS in OT program)**

Students may be eligible to transfer at one point only, the fall semester of the junior year (Year 3), dependent of seat availability. Applications will be due May 1 of the year that the student meets sophomore status. No internal transfers will be permitted in years where there are 15 or more current undergraduate pre-professional phase OT students in good academic standing who anticipate moving into Year 3.

**Progression Criteria**

Students who demonstrate the following profile are guaranteed matriculation into the M.S. in Occupational Therapy Program:

- Completion of undergraduate major and college studies requirements
- Overall minimum 3.0 GPA for all college coursework (including transfer courses)
- Overall minimum 3.0 GPA in Occupational Therapy program prerequisites (minimum grades of “B-” or better in all Occupational Therapy program prerequisite courses)

By October 15 of the Year 3 (or equivalent) of undergraduate study, students should:

- Submit the matriculation documents identified below (available from the Occupational Therapy Department or on the program’s webpage: [www.PhilaU.edu/OT](http://www.PhilaU.edu/OT))
  - Academic Standards Statement
  - Clinical Observation Document: documentation of at least 20 hours of clinical observation under the supervision of an occupational therapist
  - Program Prerequisite record
  - Current resume
  - One letter of recommendation from PhilaU faculty
  - Career goals essay (no more than 500 words)
  - GRE or MAT scores (prior to July following Year 3 of studies)

Students who are unable to achieve the standards listed above are not eligible to matriculate into the M.S. in Occupational Therapy Program. They will complete electives, by advisement, during their fourth undergraduate year to complete the bachelor degree in their chosen majors. Students who wish to reapply to the OT graduate program after receiving their bachelor degrees may be advised to repeat specified courses to raise their GPAs.

**PHYSICIAN ASSISTANT STUDIES**

**Combined B.S. Health Sciences/M.S. Physician Assistant Studies**

*Mission*

The mission is to provide students with the foundation of knowledge, technical skills and critical thinking necessary to competently perform the functions of the physician assistant profession in an ethical, empathetic manner working with a licensed practicing physician. A secondary focus is to prepare students to provide comprehensive medical services to diverse under-served patient populations in inner-city and rural locations.

### *Learning Outcomes*

Physician Assistant graduates will:

- Elicit an accurate medical history including Chief Complaint, History of Present Illness, Past Medical History, Family History, Review of Systems, Social History and Sexual History in both a complete and directed format.
- Perform common clinical procedures.
- Define the important ethical issues involved with the medical care of patients and describe how these affect PA practice.
- Recognize when a problem is beyond the scope of the PA provider and refer the patient to her/his supervising physician, or recommend appropriate specialty consultation.
- Prudently recommend laboratory, radiology, cardiographic and other ancillary diagnostic studies appropriate to the history and physical findings. Graduates must list the common contraindications and complications of these tests.
- Demonstrate competence in written, oral and electronic forms of communication. Approach patient encounters using language, body posture, facial expression, speech process and speech content that promote open communication and foster a trusting effective patient-provider relationship.
- Perform a computer medical literature search and critically evaluate the medical literature in terms of its relevance to clinical practice.
- Develop an appropriate treatment plan for common disorders that may include medications, surgery, counseling, therapeutic procedures, rehabilitative therapies or other therapeutic modalities.

### *Program Description*

A physician assistant (PA) is a medical professional who practices medicine with the supervision of a licensed physician. PAs provide a wide variety of medical services traditionally performed by physicians. The concept for the profession originated in the early to mid-1960s as a way to enhance the provision of medical care to people residing in medically-underserved areas. The care of the underserved remains an ongoing goal of the profession.

Physician assistants work in all 50 states, Guam and the District of Columbia in a wide range of medical settings including physicians' offices, hospitals, clinics, emergency departments, military and Veterans Administration installations, nursing homes, industrial health centers and correctional institutions. They work in conjunction with a physician and have a wide array of responsibilities including taking medical histories, conducting physical examinations, ordering or performing lab and other diagnostic tests, synthesizing data to make a proper diagnosis, developing a treatment plan, performing health-related counseling, performing various procedures such as casting, suturing and assisting in surgery. PAs can prescribe medication in all states.

The Physician Assistant Studies program is a comprehensive academic experience that stresses the practical application of current medical theory. Most of the program faculty members are actively-practicing health care providers with a great depth of knowledge and experience. Students are exposed to the clinical environment throughout their education with patient contact even during the classroom or didactic portion of the program. The Physician Assistant Studies program is fully accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).

The typical student in the Physician Assistant Studies program will spend approximately \$3,000 on medical equipment, books, malpractice liability insurance and other program-related fees for both professional-phase years combined. This does not include tuition, housing, food, living expenses, travel costs, health center fees, graduation fees and pre-professional phase book costs. All of these costs, except book costs, are listed elsewhere in the University catalog.

While this is a full-time, day program, the clinical or practical portion may involve some night and weekend hours. Admission criteria, procedures and technical standards are listed in the Physician Assistant Studies Program Information Booklet available from the Office of Admissions and at [www.PhilaU.edu](http://www.PhilaU.edu).

### **Freshman Admission Option**

This option is designed for students who have no, or few college credits (less than 16 credit hours). It is designed as a five-year course of study and includes complete undergraduate and graduate degrees. The first six semesters (three years) make up the pre-professional phase and are designed to academically prepare students for PA training and provide a comprehensive general education. The pre-professional phase consists of medically-related science and psychology prerequisite courses along with all of the components of the College Studies program. After successful completion of the pre-professional phase (which includes maintaining the required grade point averages of 3.0 cumulative and 3.0 science and core prerequisite, acquiring the required letters of reference, completing a personal essay and obtaining approval of the PA Program Admissions Committee), students are admitted to the professional phase. Students must complete all required courses in the pre-professional phase to enter the professional phase.

The professional phase is 25 months of continuous study and includes the didactic level that consists of three semesters of classroom and laboratory work in basic and applied medical science, and the clinical level that consists of six rotations and four preceptorships at a variety of clinical sites such as hospitals and medical offices. Students must complete all didactic-level courses before they can enter the clinical level. The first semester of the professional phase is composed of mandatory foundation courses. The remaining courses in the professional phase are graduate courses.

After successful completion of the fall semester of year four (the first professional-phase semester), students will receive a Bachelor of Science in Health Sciences and be eligible to participate in the May Commencement ceremony. Upon completion of the full five-year program, graduates will receive a Master of Science in Physician Assistant Studies, be eligible to sit for the Physician Assistant National Certifying Examination, and be able to participate in the Commencement ceremony.

### **Transfer Student Option**

This option is designed for students with a substantial number of college credits (approximately 64), but who do not have a bachelor's degree. This option includes an accelerated bachelor's degree-completion program, and the complete professional-phase Physician Assistant Studies Program. Students wishing to enter the program in this option must meet two sets of prerequisite requirements prior to entrance into the program. The first is the PA-specific prerequisites that include science and psychology courses. The second consists of the College Studies prerequisites that are general education courses required for the bachelor's degree. Both sets of requirements must be met before a student can gain entrance into the program. These prerequisites are listed in the Physician Assistant Studies Program Information Booklet available from the Office of Admissions and at [www.PhilaU.edu](http://www.PhilaU.edu).

Students admitted into this option typically spend three years at the University. The first year (two semesters) comprises the pre-professional phase that consists of advanced science and psychology courses, and the remainder of the College Studies or general education program. The pre-professional phase may be shorter, depending on the number of applicable transfer credits a student has, but must be at least one semester. After successful completion of the pre-professional phase, students will enter the professional phase, which is described above.

After successful completion of the fall semester of year two (the first professional-phase semester) students will receive a Bachelor of Science in Health Sciences and be eligible to participate in the May Commencement ceremony. Upon completion of the full three-year program (both the pre-professional and the professional phases) graduates will receive a Master of Science in Physician Assistant Studies, be eligible to sit for the Physician Assistant Studies National Certifying Examination and be able to participate in the Commencement ceremony.

## **Clinical Education**

Upon successful completion of the didactic level of the professional phase, the PA student proceeds into the clinical education level of the program. The PA student will spend 36 weeks in Clinical Rotations (six 6-week blocks) and another 24 weeks in Preceptorships (four 6-week blocks) before completing the course of study for Physician Assistant Studies. These experiences most likely will involve night and weekend hours.

### **Clinical Rotations (6 credits/rotation)**

The clinical rotations are six-week blocks in the areas of medicine, pediatrics, surgery, psychiatry/mental health, women's health and emergency medicine, and are designed to expose the PA student to patient care in a variety of settings. The student is directly involved with the evaluation and management of patients to the extent that the clinical preceptor or supervisor is comfortable with the level of knowledge and skills of the PA student. Typically, the student spends at least 40 hours per week in the clinical setting, attending to patients and partaking of continuing medical-education seminars.

### **Preceptorship IA, IB, IIA, IIB (6 credits/ Preceptorship)**

These clinical training experiences are designed to enhance the PA student's knowledge, technical skills, clinical judgment and confidence in the evaluation and management of common medical problems. One of these must be done as two 6-week blocks in an ambulatory, primary-care setting such as an outpatient family practice, general practice or general internal medicine office or center.

The remaining preceptorship experiences include the Floating Medicine Block in which students do six additional weeks in a medically related specialty, such as family, internal or geriatric medicine, and the clinical elective. During the elective, students can spend more time in one of their rotation specialties or gain experience in other settings such as neonatology, HIV, correctional medicine, urology, orthopedic surgery, cardio-thoracic surgery and others. Continuity of care and regular feedback from clinical faculty are the hallmarks of these experiences.

### **PA Program Technical and Professional Standards**

For admission to the program, candidates must:

- Have the academic ability to learn a large volume of technically detailed information and be able to synthesize and use this data to solve complex clinical problems. This information must be acquired in a short and intense period of study that requires well-developed study skills and a high level of motivation and may require considerable personal and financial sacrifice.
- Possess the emotional maturity and stability to approach highly stressful human situations in a calm and rational manner.
- Have the ability to effectively communicate with ill patients from a wide diversity of cultural and socioeconomic backgrounds in an empathetic and sensitive fashion.
- Have well-developed oral and written communication skills.
- Have comfort with the role of a dependent practitioner operating under the supervision of a licensed physician, while simultaneously feeling comfortable with the large amount of responsibility that goes along with the delivery of patient care in sometimes remote locations.
- Display strong ethical integrity consistent with working as a health care professional.
- Have sufficient physical abilities in the areas of sensory function (vision, hearing and touch sensation), hand-eye coordination, and neurologic and muscular coordination and control to competently perform the technical activities that are a critical part of the program and profession, including:
  - Physical examinations, which include visual inspection, listening to heart and lung sounds with a stethoscope, examination by touch to gather information such as skin temperature and texture and other maneuvers.

- Performance and interpretation of diagnostic studies such as blood tests, EKGs and X-rays.
- Surgical assisting, which can involve activities such as control of bleeding and suturing (wound closure by placing stitches).
- Performing common procedures such as applying casts, suturing, cardiopulmonary resuscitation (CPR), venipuncture (placing needle into a vein to collect a blood sample) and starting an intravenous access line.

## School of Continuing and Professional Studies

**Executive Director, School of Continuing and Professional Studies:** F.E. Congdon Jr.

**Director, Academic Programs:** E. Kolodner

**Director, Marketing:** K. Moran-Gannon

**Director, Student Services:** S.M. Calder

**Director, Professional Education:** T.E. Stasik

**Director, Occupational Therapy Assistant Studies:** M. Dahl

The School of Continuing and Professional Studies at Philadelphia University is based on the philosophy that education is a lifelong experience influencing personal growth, career advancement or career change. Degree programs are designed to accommodate adult learners and their professional and personal obligations. Each term, students enroll in baccalaureate, associate and certificate programs on the Main Campus, Bucks Campus and off-campus locations.

To accommodate busy professional and personal schedules, courses are offered in accelerated evening and weekend sessions. The program uses a hybrid distance-learning model. Students attend on-campus class sessions and participate in electronically-mediated learning experiences during those times when they are not on campus. Select courses are offered online. Special programs and tutoring services are available to help students adjust to the academic environment and strengthen skills in various content areas. Additionally, students who excel in their academic work are recognized on the dean's list and in graduation honors.

The faculty and staff are committed to providing excellence in all phases of the academic experience. Continuing Studies strives to provide a challenging environment where students are able to reach their career and educational goals, as well as enrich their personal lives.

### ACCELERATED PROGRAMS

#### B.S. Degree Completion Program

The Accelerated Bachelor of Science degree is designed to serve the educational needs of adult learners. Uniquely structured for adults with at least 30 previously-earned college credits, this program offers Bachelor of Science degrees in: Behavioral and Health Services, Leadership in Emergency Services, Health Sciences, Health Services Management, Human Resource Management, Information Technology, Law Enforcement Leadership, Leadership in Homeland Security, Organizational Leadership and Pre-MBA. The program features eight-week terms, transfer of 60 or more credits from previously attended colleges and universities and ongoing academic advising and personal attention.

#### A.S. in Occupational Therapy Assistant Studies

This 69-credit program prepares individuals to practice as an occupational therapy assistant in a variety of settings with people of all ages. The program features accelerated eight-week academic terms, five clinical fieldwork experiences and intensive guidance by faculty and mentors. Lecture and laboratory classes are scheduled two evenings per week and Saturday mornings. Students may complete the program in 23 months. Curricular themes permeate all courses and key professional concepts are continually reinforced. Fall entry only.

### CERTIFICATE PROGRAMS

Certificates are beneficial for individuals seeking the basic knowledge and skills required for an entry-level position in a specific field. They are valuable for those seeking additional competencies to enhance their careers. For some individuals, certificate programs are useful as preparation for admission into one of the University's degree programs.

Candidates are required to earn a “C” or better in all certificate courses. A maximum of six semester credits can be transferred from other accredited institutions. Students may complete the certificate program by itself or use the credits as part of a degree program.

In order to be awarded a certificate, students must apply for admission to the program before beginning the third course. Students who choose to complete the requirements of two or more certificates may apply one overlap course to both certificates.

### **NON-DEGREE STUDIES**

Continuing Studies students who are not interested in working toward a degree or certificate, but who wish to take courses at the University to learn new skills for professional or personal development, are welcome to take evening and weekend courses, provided permission is obtained from the Director of Student Services and prerequisites are satisfied or waived.

### **BUCKS COUNTY CAMPUS**

The Bucks County satellite campus is located in the Bucks County Technology Park, 4800 E. Street Road in Trevoise, Pa. 19053. Easily accessible to residents of Lower Bucks County and Northeast Philadelphia, this campus location has been designed to serve the educational and career needs of adult students. Courses are offered in the evening and on Saturdays to accommodate the schedules of adults who balance a full calendar of professional and personal responsibilities. Academic advising, registration, book sales and computer labs are all available at this location. To schedule an advising appointment, call 215.953.4500.

### **SUMMER SESSIONS**

The School of Continuing and Professional Studies offers day and evening classes from May through August during one 12-week and two 6-week sessions. Accelerated courses are offered in an 8-week term within the summer schedule. Summer courses allow students to accelerate their degree programs, compensate for interruptions in their studies, facilitate career advancement or enrich their personal interests.

Information is available through the School of Continuing and Professional Studies or by calling 215.951.2900 or email [evening@PhilaU.edu](mailto:evening@PhilaU.edu).

### **On-Site Partnership Programs**

The School of Continuing and Professional Studies is committed to designing and delivering customized, credit-bearing educational programs for corporations and organizations with sufficient employees to enroll ten or more students per class at the location of their choice. Companies and organizations that are interested in exploring this unique program should contact Frank Congdon, executive director of Continuing and Professional Studies, at 215.951.2902 to arrange a program assessment meeting.

## B.S. ACCELERATED DEGREE PROGRAM

*The checklist for this program can be found in the checklist section of the catalog.*

Accelerated programs and courses are only available to CPS students

The School of Continuing and Professional Studies offers an accelerated degree completion program of 60 credits for working professionals. The courses are offered in 8-week terms and focus on adult general education requirements, professional competencies, a choice of ten majors and a limited choice of electives. Candidates for admission to this program must have previously earned 30-60 credits from regionally-accredited institutions. Candidates must demonstrate competency in writing, mathematics, information systems, humanities, history, science and social science. Students can accumulate credits toward their first 60 credits through existing university coursework, pre-approved transfer coursework, CLEP examination and prior-learning assessment. Extra credits in the competency plus elective portions will reduce the number of free electives at the end. Candidates are required to complete an application and related materials, attend an individual interview and write a personal statement. Transcript evaluations are an integral part of this process.

### *Program Learning Outcomes*

Students who graduate from the accelerated B.S. degree will be able to:

- Integrate liberal arts and sciences concepts into Continuing and Professional Studies core courses, major area course work and professional endeavors.
- Successfully display, through a team project, their ability to resolve issues, propose solutions and make decisions with students trained in disciplines different from their own.
- Find, evaluate and use information in order to conduct an in-depth analysis of an industry, organization or economic sector.
- Successfully display, through a team project, their ability to resolve issues and propose solutions in a multiethnic environment.
- Demonstrate responsible ethical behavior in academic and business environments by recognizing ethical issues that are presented in a complex, multilayered context and within two identified courses.
- Apply ethical perspective and concepts to an ethical question accurately, and demonstrate their ability to consider full implications of that application.
- Effectively demonstrate knowledge of their profession globally including their ability to forecast future changes and proactively respond to them.

General Education		15 credits
HIST 321	Business, Industry, & Work in American History	3
HUMN 310	Globalization and World Politics	3
SOC 310	The Social Science of the Workplace	3
COMM 320	Professional Communication Skills	3
CSSEM 499	Professional Studies Capstone Seminar	3
Continuing Professional Studies Core		18 credits
CSSEM 300	Professional Practice Seminar	3
MGMT 361	Leadership Theory & Ethical Practices	3



ECON 331	Economic Decision Making	3
STAT 311	Finding and Evaluating Statistical Data	3
FINC 323	Financial Decision Making	3
IT 201	Learning with Technology	3
Major – select one 15-18 credit option below		15 - 18 credits
		3
		3
		3
		3
		3
Free Electives		9-12 credits
		3
		3
		3
		3
Transfer Credits		60 credits
CREDIT TOTAL		120 CREDITS

## PROGRAM MAJORS

Behavioral and Health Services 15 credits

*Choose 5 of 6 listed courses*

PSYCH 201	Abnormal Psychology	3
PSYCH 222	Counseling Psychology	3
PSYCH 213	Developmental Psychology	3
PSYCH 233	Interpersonal Relations and Small Group Dynamics	3
BEHLT 341	Behavioral Health and Neurorehabilitation	3
BEHLT 499	Applied Project in Behavioral Health and Neurorehabilitation	3

Health Services Management 15 credits

HRM 350	Cross Cultural Communication and Diversity Management	3
HLTSV 310	Survey of Health Services Delivery Systems	3
HLTSV 315	Public Policy and Planning in Health care	3
HLTSV 325	Emerging Issues in Health care	3
HLTSV 499	Capstone Seminar in Health Services Management	3

Human Resource Management 15 credits

MGMT 320	Human Resource Management	3
HRM 321	Staffing and Resource Development	3
HRM 336	Compensation and Benefits, Health and Safety	3
HRM 421	Organizational and Employee Relations	3
HRM 499	Applied Research and Practice in Human Resource Management	3

Information Technology 15 credits

IT 315	Information Technology I	3
IT 317	Information Technology II	3
IT 320	Database Management	3
IT 410	Needs Assessment	3
IT 499	Project Management	3

Organizational Leadership 15 credits

PSYCH 233	Interpersonal Relations and Small Group Dynamics	3
COMM 310	Communication Theory and Practice	3
MKTG 320	Visual Literacy	3

HRM 350	Cross Cultural Communication and Diversity Management	3
OL	Elective	3

Pre M.B.A.		15 credits
MGMT 401	Operations Management	3
MKTG 102	Principles of Marketing	3
ACCT 101	Financial Accounting	3
ACCT 102	Managerial Accounting	3
BUS 499	Business Capstone Seminar	3

Health Sciences 15-16 credits

Choose 5 of 6 listed courses:

PSYCH 201	Abnormal Psychology	3
PSYCH 233	Interpersonal Relations and Small Group Dynamics	3
PSYCH 213	Developmental Psychology	3
BEHLT 341	Behavioral Health and Neurorehabilitation	3
BEHLT 499	Applied Project in Behavioral Health and Neurorehabilitation	3
BIOL 202	Anatomy and Physiology II	4
Note: The Professional Studies core for this major is required.		
BIOL 104	Biology II	3
IT 201	Learning with Technology	3
MGMT 361	Leadership Theory & Ethical Practices	3
BIOL 201	Anatomy and Physiology I	4
STAT 311	Finding & Evaluating Statistical Data	3

Law Enforcement Leadership 15 credits

MGMT 320	Human Resource Management	3
LAWEN 301	Planning for Law Enforcement Organizations	3
LAWEN 310	Contemporary Law Enforcement Strategies	3
LAWEN 410	Advanced Law Enforcement Theory and Management	3
LAWEN 499	Capstone Seminar and Project in Law Enforcement	3

Leadership in Emergency Services 15 credits

EMS 310	Emergency Services Law	3
EMS 320	Emergency Management Planning	3
EMS 330	Public Health Issues Impacting Emergency Services	3

EMS 410 Disaster Response and Recovery Planning 3  
EMS 499 Theoretical Applications and Applied Project in Emergency Services Leadership 3

Leadership in Homeland Security 18 credits

LHS 350 The Foundations of Homeland Security and Defense 3  
LHS 360 Unconventional Conflict 3  
LHS 403 Critical Infrastructure: Vulnerability, Analysis and Protection 3  
LHS 4XX Disaster Politics and Policy 3  
LHS 4XX Command and Control 3  
LHS 4XX Capstone Seminar and Applied Project in LHS 3

**ASSOCIATE IN SCIENCE: BUSINESS ADMINISTRATION**

*The checksheet for this program can be found in the checksheet section of the catalog.*

Evening only – Available to Philadelphia University employees only.

College Studies		(21-23 credits)
WRTG 105	Writing About Workplace Culture	3
SCI 101	Environmental Science	3
MATH( )	Quantitative Reasoning I	3/4
MATH( )	Quantitative Reasoning II	3/4
<i>For Quantitative Reasoning select one two-course sequence:</i>		
MATH 101/1	Finite Mathematics	3
MATH 102	Pre-calculus	3
MATH 103	Introduction to Calculus	3
MATH 111	Calculus I	4
MATH 102	Pre-calculus	3
MATH 111	Calculus I	4
MATH 103	Introduction to Calculus	3
MATH 112	Calculus II	4
HIST( )	Historical Understanding I	3
SOC( )	Social Science I	3
HUMN( )	Humanities I (WRTG 101, HUMNx)	3
Business and Economics Core		(30 credits)
INFO 101	Introduction to Information Systems	3
MGMT 301	Principles of Management	3
STAT 201	Statistics I (MATH 100)	3
MKTG 102	Principles of Marketing	3
ACCT 101	Financial Accounting	3
BLAW 301	Business Law I	3
ACCT 102	Managerial Accounting (ACCT 101)	3
FINC 301	Financial Management (ACCT 101 and STAT 202 or MATH 321)	3
ECON 205	Macroeconomics	3
ECON 206	Microeconomics	3
Free Electives	(9 credits)	
		3
		3
		3

CREDIT TOTAL: 60-62

*\*Prerequisites are listed after the course name in parentheses.*

*Associate in Science: Health and Human Services*

Restricted Enrollment

This 60 credit program builds on technical training programs that have been approved by the Pennsylvania Department of Education for post-secondary credit and that have articulation agreements with the University.

District 1199C Training and Upgrading Fund

Program		Credits
BEHLT 199	Behavioral Health Technician Training Program	21

Core Competencies

WRTG 101	Writing Seminar I	3
COMM 320	Professional Communication Skills	3
MATH 215	College Algebra	3
SCI 101	Environmental Science	3
HIST 114	The Rise of the Modern World: American Transitions	3
PSYCH 101	Introduction to Psychology	3
HLTSV 210	Ethical Issues for Human Services Providers	3
IT 101	Introduction to Information Systems	3

Major Concentration

PSYCH 201	Abnormal Psychology	3
PSYCH 223	Interpersonal Relations and Small Group Dynamics	3
PSYCH 224	Psychology of Addiction	3
COMM 310	Communication Theory and Practice	3
BEHLT 290	Clinical Interactions in Behavioral Health	3
CREDIT TOTAL:		60

**JEWISH EMPLOYMENT AND VOCATIONAL SERVICES**

*The checksheet for this program can be found in the checksheet section of the catalog.*

**ORLEANS TECHNICAL INSTITUTE**

Program		Credits
HVMSV 199	Human Services Training Program	30
<b>Core Competencies</b>		
<hr/>		
WRTG 105	Writing About Workplace Culture	3
MATH 215	College Algebra	3
SCI 101	Environmental Science	3
HIST 114	The Rise of the Modern World: American Transitions	3
PSYCH 101	Introduction to Psychology	3
COMM 310	Communication Theory and Practice	3
IT 101	Introduction to Information Systems	3
<b>Major Concentration Category</b>		
<hr/>		
PSYCH 201	Abnormal Psychology	3
PSYCH 223	Interpersonal Relations and Small Group Dynamics	3
BEHLT 290	Clinical Interactions in Behavioral Health	3
CREDIT TOTAL		60

## ACCELERATED A.S. IN OCCUPATIONAL THERAPY ASSISTANT STUDIES

*The checklist for this program can be found in the checklist section of the catalog.*

This 69-credit program prepares individuals to practice as an occupational therapy assistant in a variety of settings with people of all ages. The program features accelerated 8-week academic terms, five clinical fieldwork experiences and intensive guidance by faculty and mentors. Lecture and laboratory classes are scheduled two evenings per week and Saturday mornings. The Program uses a hybrid distance learning model. Students attend bi-weekly on-campus class sessions and participate in electronically-mediated learning experiences during those times when they are not on campus. Students may complete the program in 23 months. Curricular themes permeate all courses and key professional concepts are continually reinforced. Fall entry only.

Candidates for admission are required to submit an application that includes a resume, personal statement and evidence of two OT site visits (forms included in application packet) as well as participate in an individual interview.

The occupational therapy assistant studies program at Philadelphia University is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. ACOTE's telephone number c/o AOTA is (301) 652-AOTA. Graduates are eligible to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the graduate will be a Certified Occupational Therapy Assistant (COTA). In addition, most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

FIRST YEAR COURSEWORK		(33 credits)
IT 201	Learning with Technology	3
WRG 105	Writing about Workplace Culture	3
BIOL 101	Current Topics in Biology	3
HIST 232	History and Philosophy of OTA Practice	3
OTA 300	Anatomy, Physiology and Biomechanics	6
PSYCH 101	Introduction to Psychology	3
OTA 302	Occupations across the Lifespan: Infancy through Adolescence	3
OTA 306	Conditions I: Infancy through Adolescence	3
OTA 304	Occupations across the Lifespan: Adulthood	3
OTA 308	Conditions II: Adulthood	3
SECOND YEAR COURSEWORK		(36 credits)
OTA 310	Environments and Contexts of Occupation	3
OTA 410	Interventions I: Infancy through Adolescence	4
OTA 412	Interventions II: Young through middle Adulthood	4
MATH 215	College Algebra	3
OTA 414	Interventions III: Late Adulthood	4
OTA 400	Leadership and Human Service Systems	3



OTA 406	Fieldwork II A	6
OTA 402	Ethics and Critical Thinking I	2
OTA 408	Fieldwork II B	6
OTA 404	Ethics and Critical Thinking II	1

## Minors and Concentrations

### Minor

A minor is a set of courses that provide supplemental study in a particular subject area. A student may choose a minor with the assistance of an academic advisor upon completion of 60 semester hours. Options for minors are determined by the academic program and consist of a minimum of twelve credits in the subject area. A student may not use the same course for credit in both the major and the minor areas. Descriptions and requirements for available minors are below.

Guidelines for minors:

- A student may not combine a major and minor in the same or similar functional area (e.g., Finance major and Finance minor; Management major and Human Resource Management minor.)
- A student may not use the same course for credit in both the major and minor areas. Any substitute elective from within the discipline must be approved, please see appropriate form available at University Registrar's website <http://www.philaU.edu/registrar/>.
- Certain courses in the minor may have prerequisite courses that need to be completed.

### Concentration

A concentration allows for an in-depth exploration of a focused area within the scope of the student's major discipline. Concentrations are available for study by majors within the appropriate area only. Options for concentrations are specified by the academic program. Similarly, the number of credits required to complete the concentration and the sequence and selection of required and elective courses are determined by the program.

Students in programs that support minors or concentrations should first meet with their academic advisor to discuss the options for minors or concentrations. Students can designate a minor or concentration after completing 60 semester hours or credits. Please see the form available online at the Learning and Advising Center's webpage: [www.PhilaU.edu/learning/](http://www.PhilaU.edu/learning/).

### Accounting Minor

12 credits

The Accounting minor permits students to enrich their knowledge of the "language of business." No matter what profession a graduate enters, the ability to read and comprehend historical and prospective financial information will be essential. Students will be provided with an in-depth understanding of generally-accepted accounting principles through intermediate accounting courses, an exposure to federal taxation and a choice of accounting electives for more intensive study.

ACCT-203 Intermediate Accounting I

ACCT-204 Intermediate Accounting II

ACCT-309 Federal Taxes I

Any advanced Accounting elective, except ACCT-316 Cost Accounting I

### Architectural Design Technology Concentration

A concentration in Architectural Design Technology is one of three options available to students who are majoring in Architectural Studies. ***For more information see College of Architecture and the Built Environment, Architectural Studies program description.***

**Architectural History/Theory Minor****12 Credits**

This minor offers students the opportunity to study art/architectural history and theory beyond the introductory level. The courses listed provide in-depth knowledge and analysis of historical periods and theoretical issues relative to the meaning and practice of architecture and related disciplines.

Required course: ARCH-422 Theories of Architecture Seminar

Any three of the following:

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ARCH-320, ARCH-341, ARCH-371, ARCH-409, ARCH-410, ARCH-425, ARCH-434

Architecture and Interior Design students may choose one of the following:

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LARCH-307 or LARCH-411

**Biodiversity Minor****12-16 credits**

This minor provides students with a broad overview of the status of the world's ecosystems and how decisions made by individuals, governments and businesses impact the environmental health of our planet both positively and negatively. Students can also opt to take a number of these courses abroad through the School for Field Studies articulation agreement.

Students choose either three or four courses from the following:

BIOL-205, BIOL-209, BIOL-310, BIOL-371, BIOL-391, BIO-392, CHEM-323, CHEM-417, ECBIO-101, ECBIO-201, ECBIO-207, ECBIO-208, ECBIO-301, ECBIO 303, ECBIO-305, ECBIO-316, ECBIO-318, ECBIO-319, ECBIO-409, ECBIO-415, PSYCH-240, SCI-381, SCI-382, SCI-493, STAT-301, STUAB-300.

**Business Minor for Non-Business Major****12 credits**

This minor is specifically designed for the Non-Business major. It will provide students with marketable business skills upon graduation that are useful to any professional person.

Required (6 to 9 credit hours)

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ACCT-101	Financial Accounting
ECON-205	Macroeconomics and/or
ECON-206	Microeconomics

Choose additional courses (total 12 credit hours)

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BLAW-301	Business Law I
ACCT-102	Managerial Accounting
FINC-301	Financial Management

**Custom Minor****12 credits**

A custom minor is a thematic grouping of four courses from any of the Colleges, and is appropriate only for courses that are currently delivered at Philadelphia University, i.e. existing faculty & facilities within the University must support the "topic" of the custom minor. At least 6 credits toward the custom minor must be completed in-residence, and the courses utilized for the custom minor, whether in-residence or

transfer, must currently exist in the University catalog. A maximum of 3 credits may be delivered as Independent Study or Course-by-Appointment.

The student must have approval to design a custom minor. The “Declaring a Custom Minor” form contains complete details and is available online from the Learning and Advising Center website <http://www.philau.edu/learning/>.

If a minor is **required** by the student’s major, the Program Director reserves the right to identify the “topic” or individual courses that may not be part of a custom minor, i.e. the proposed custom minor must meet learning outcomes specified for minors within that program.

### **E-Commerce Minor**

**12 credits**

E-commerce is the Internet-enabled buying and selling of goods and services, servicing customers, collaborating with vendors and customers and conducting electronic transactions within an organization. It includes email marketing, virtual learning, banner ads on a Webpage, 24/7 customer support systems, ERP, CRM and XML. The E-commerce minor involves the study of products, the business processes and the supply chain of startup dotcoms to brick-and-mortar Fortune 500 firms. The program features a balance of information technology and managerial decision-making.

MKTG-315	Marketing in a Digital Environment
MKTG-408	Survey of E-Commerce
MIS-202	Management Information Systems
MIS-305	Database Analysis, Design and Management

### **Economics Minor**

**12 credits**

Regardless of whether a student majors in business, textiles, the health sciences or another discipline, students will be affected by economic factors. The Economics minor will enable students to understand and anticipate economic fluctuations and make changes necessary for success.

Any four advanced Economics electives are permitted, and one course may be from FINC-303, FINC-318, FINC-321, FINC-322 or FINC-333.

### **Environmental Sustainability Minor**

**12 credits**

This minor introduces students to the practices, technologies and mindsets that allow human societies to live in balance with their surrounding environments over multiple generations. Students completing the minor must take four courses from the list below, with no more than two of them selected from the 100-level offerings.

Any four of the following:

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SUST-100, SUST-120, SUST-121, SUST-200, SUST-202, SUST-204, SUST-300, SUST-302, SUST-303, SUST-421/LARCH-521, SUST-400, SUST-402, ECBIO-101, ECBIO-201, ECBIO-319

### **Fashion Industry Management Minor**

**12 credits**

Students choosing a minor in Fashion Industry Management can look forward to employment in the textile and apparel sectors of the apparel and textile supply chain.

FASHMGT-101	Survey of Global Products
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TEXT-101 Survey of the Textile Industry

Any two of the following:

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FASHMGT-305 Production

FASHMGT-408 Apparel/Textile Sourcing

TEXT-331 Apparel Fabric Performance

**Finance Minor 12 credits**

Finance plays a crucial role in all profit and nonprofit organizations. The Finance minor is a wise choice for any student interested in a business or service organization career.

FINC-303 Intermediate Financial Management

FINC-321 Investments and Portfolio Management

Any two Finance electives, but at least one must be from

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FINC-318, FINC-322 or FINC-411.

**Foundation Design Minor 12 credits**

The Foundation Design minor introduces students to drawing and the basic elements and principles of two- and three-dimensional design, as well as their application in the design process. In depth studies emphasizing the use of color are undertaken. A general survey of the philosophy and utility of CAD systems may be accomplished through hands-on experience.

DSGNFND-103 Design Foundations I or ADFND-101 Design I

DRAW-101 Drawing I

Any two of the following:

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ADFND-102, ADFND-104, ARCHDSN-208, CAD-201, DRAW-201, DRAW-206, DSGNFND-203 or DRAW-303

Any course from a design major approved by the advisor.

**Genetics Minor 13-14 credits**

The Genetics Minor will offer students a strong background in a science which is an integral part of biological and health-focused fields. Completion of the minor will equip our graduates with a skill set that will enhance their professional practice. Future practitioners will gain the ability to recognize “red flags” in a family history that may indicate a future illness or explain present symptoms. In the lab, personnel will have had hands-on experience with diagnostic and investigative tools used currently in research, clinical, and forensics fields worldwide. Prerequisite: minimum grade of C- (1.67) in Biology II and BIOL-104L Biology II Lab (BIOL-104/104L).

Courses:

BIOL-207 Principles of Genetics

BIOL-207L Principles of Genetics Lab (corequisite with BIOL 207)

BIOL-302 Medical Genetics

BIOL-307 Developmental Genetics

BIOL-401 Molecular Genetics

BIOL-402 Genetics Seminar (required 4<sup>th</sup> course)

Students taking BIOL-207/207L as part of the major curriculum (i.e. Biology, Pre-Medical Studies, Physician Assistant Studies) will need to choose BIOL 302, BIOL 307, BIOL 401 and BIOL 402. Students who do not have a requirement to complete BIOL 207/207L as part of their major (i.e. Biochemistry, Biopsychology, Chemistry, Environmental and Conservation Biology, Health Science, Psychology) will need to complete BIOL 207/207L to satisfy prerequisite requirements for BIOL 402 (and BIOL 302 if this course is elected).

**Graphic Design Minor for NON-Design Majors 14 credits**

Choose at least one from:

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DSGNFND-103. Design Foundation I, DSGNFND-203, Design Foundation II or VSDES-101 Visual Studies: Design. (each 3 credits)

GRAPH-201. Design III. (required. 4 credits)

GRAPH-202. Design IV. (required, 4 credits)

Plus choose any one course from Graphic Design Designated Electives to total 14 credit hours:

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GRAPH 305; GRAPH 310; GRAPH 320; GRAPH 341; GRAPH 408; GRAPH 409 (each 3 credits).

**Graphic Design Minor (for Design Majors OTHER than Graphic, but NOT including Animation and Interactive Design and Media): 14 credits**

Pre-requisite (at least one): ADFND-101, DSGNFND-103, DSGNFND-203 or VSDES-101 Visual Studies: Design.

plus at least one: DRAW-101., DRAW-102. Or VSDRW-101 Visual Studies: Drawing

GRAPH-201. Design III (required; 4 credits)

GRAPH-202. Design IV (required; 4 credits)

Plus choose any two courses from Graphic Design Designated Electives to total 14 credit hours:

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GRAPH 208; GRAPH 305; GRAPH 310; GRAPH 320; GRAPH 341; GRAPH 408; GRAPH 409 (each 3 credits).

**Graphic Design Minor for Animation and Interactive Design and Media: 12 credits**

Pre-requisite (at least one): DSGNFND-103., DSGNFND-203. or VSDES-101 Visual Studies: Design.

plus at least one: DRAW-101., DRAW-102. or VSDRW-101 Visual Studies: Drawing.

Further pre-requisite: GRAPH-201 and GRAPH-202.

Choose any four courses from Graphic Design Designated Electives [3 credits each] to total 12 credit hours:

GRAPH 208; GRAPH 305; GRAPH 310; GRAPH 320; GRAPH 341; GRAPH 408; GRAPH 409 (each 3 credits).

**Historical Preservation Concentration**

A concentration in Historical Preservation is one of three options available to students who are majoring in Architectural Studies. **For more information see College of Architecture and the Built Environment, Architectural Studies program description.**

**Historical Preservation Minor****12 credits**

This minor provides a foundation in the field of historic preservation. The required courses cover issues including the history of the movement in the U.S., contemporary practice and field work, economic consequences, as well as methods of and standards for documentation. Elective courses broaden the student's experience with discussions of American urban traditions, architectural ornament, vernacular ways of building around the world and design considerations in a preservation project.

EDVS-221 Introduction to Historic Preservation

EDVS-266 Preservation Technology

Any two of the following:

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EDVS-428, LARCH-507, EDVS-341, EDVS-302, EDVS-324, PHOTO-436, EDVS-300**Human Resource Management Minor****12 credits**

The Human Resource Management minor provides students with the basic skills needed to manage the personnel component of an organization. The minor concentrates on the processes by which jobs are designed and filled by human resources, as well as on how a skilled work force is maintained in an organization. The student will gain familiarity with the techniques of recruiting, hiring, training and evaluating employees. The student will also become familiar with the basic concepts of employee and union-management relations, including contract negotiations. Not available to management majors.

MGMT-310 People and Teams in Organizations

MGMT-320 Human Resource Practices and Tools

MGMT-418 Industrial Relations

One advanced Management elective from the following:

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MGMT-307, MGMT-311, MGMT-326, MGMT-331, MGMT-381, MGMT-411, MGMT-416, MIS-305, MIS-401, PSYCH-230 or PSYCH-231.**International Business Minor****12 credits**

The world in which business is being conducted is changing rapidly and is creating new challenges and opportunities for managers. The International Business minor is provided for students who want to strengthen their knowledge and understanding of global changes and their impact on business.

ECON-401 International Economics

FINC-318 International Finance and Development

MGMT-307 International Management

MKTG-324 International Marketing

Landscape Architecture

These two minors — Landscape Design, which is for design majors (primarily for architecture or interior design majors), and Landscape Planning, which is for non-design majors (primarily for environmental and conservation biology or environmental sustainability majors) — introduce the student to the field of landscape architecture.

For the Landscape Design minor, the required courses cover the various areas — history/theory, technology, horticulture and design — that constitute an understanding of the discipline relative to design.

For the Landscape Planning Minor, the required courses cover the various areas — technology, communication and history — that are needed for an understanding of the discipline relative to planning.

**Landscape Design Minor** **13-15 credits**

One of the following plant/ecology courses (3 or 4 credits):

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ECBIO-208 Local Flora (4 credits)

LARCH-105 Landscape Ecology (3 credits)

One of the following history/theory courses (3 cr):

---

LARCH-206 History of Landscape Architecture I or

LARCH-307 History of Landscape Architecture II or

LARCH-411 Landscape Architecture History III: Urban Landscape Design

LARCH-207 LA Tech: Grading (3 credits)

One of the following Landscape Architecture design studio studios (4 or 6 credits):

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LARCH-201 LA Design III: Site Design (4 credits)

LARCH-302 LA Design VI: Community Design (6 credits)

LARCH-401 LA Design VII: Interdisciplinary Design Studio (6 credits)

**Landscape Planning Minor** **12 credits**

LARCH-207 Technology I: Grading (3 credits)

LARCH-411 LA History III: Urban Landscape Design (3 credits)

One of the following plant/ecology courses (3 or 4 cr):

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ECBIO-208 Local Flora (4 credits) or

LARCH-105 Landscape Ecology (3 credits)

One of the following courses (3 credits):

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LARCH-310 GIS for Landscape Analysis or

LARCH-412 Technology III: Hydrology

**Law and Society Minor** **12 credits**

The Law and Society minor will contribute to the students' understanding of law from interdisciplinary perspectives (sociology, psychology, anthropology and political science). It will prepare students for professional careers in fields that rely on critical thinking and written and oral advocacy skills. The Law and Society minor will also provide a firm background in legal, political and social issues for students that are focusing on a broad array of other professional fields at Philadelphia University such as





**Multimedia and Visualization Minor****12 credits**

This minor introduces students to the conceptual and technical issues involved in creating and producing multimedia and visualization projects. Emphasis will focus on the application of digital technologies to enhance the design and presentation process.

Select four from the following:

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ARCH-324	Visualization: Experimental Modeling
ARCH-326	Visualization: Advanced Modeling
ARCH-415	Visualization: Multimedia
DIGD-407	Digital Design and Visualization Studio
GRAPH-310	Digital Imaging and Photographic Manipulation

**Organizational Behavior Minor****12 credits**

This minor provides the student with an understanding of how organizations are designed to successfully perform a number of business activities, including making decisions, motivating members and dealing with conflict. Students also take courses that focus on areas such as entrepreneurship, managing people or health care. The knowledge and skills learned from such courses, combined with the knowledge base gained from students' major fields, increase students' understanding of the organizations in which they will be employed. It also enhances the likelihood of promotion to managerial positions or the successful development of an individual's own business. Not available to Management majors.

MGMT-310	People and Teams in Organizations
MGMT-412	Seminar: Leading Organizational Innovation and Social Responsibility

Two advanced Management electives from the following:

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MGMT-307, MGMT-311, MGMT-326, MGMT-331, MGMT-381, MGMT-411, MGMT-416, MGMT-418, MIS-305, MIS-401, PSYCH-230 or PSYCH-231.

**Photography and New Media Concentration**

A concentration in Photography is one of three options available to students who are majoring in Architectural Studies. ***For more information see College of Architecture and the Built Environment, Architectural Studies program description.***

**Photography Minor****12 credits**

This minor provides a foundation in photographic techniques, processes, history and theory. Coursework focuses upon photography as a tool for the documentation, research and preservation of architecture, as part of visual culture in its application to commercial, fashion, advertising and product design, and as a medium for self-expression.

PHOTO-101	Introduction to Photography: Black and White
PHOTO-102	Introduction to Photography: Digital
PHOTO-307	History of Photography

One of the following:

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PHOTO-436 Historic Preservation Documentation: Photography, PHOTO-201, PHOTO-302, PHOTO-303

**Pre-M.B.A. Minor for Business Majors**

**12 credits**

The Pre-M.B.A. minor for Business majors provides the opportunity to begin taking graduate-level business courses in the senior year, allowing students who have completed their Bachelor of Science Degree in Business Administration to complete a Master of Business Administration degree in one year of daytime study. The M.B.A. may also be completed in the evening. This minor is for undergraduate business majors only. Students must be accepted into the M.B.A. program before registering for graduate courses and may only begin taking graduate courses in senior year. For information about the joint B.S./M.B.A see the Office of Graduate Studies in the College of Design, Engineering and Commerce.

MBA-625 Management Communications and Negotiations

MBA-628 Accounting for Management Decisions

Plus two undergraduate business courses, excluding business core, from the same functional area. The courses must be outside of the student's undergraduate major. It is advised that students selecting this minor consult with a graduate advisor before selecting these two courses.

**Pre-M.B.A. Minor for Non-Business Majors**

**27 credits**

The Pre-M.B.A. minor for Non-Business majors provides the opportunity to begin taking graduate-level business courses in the senior year, allowing students who have completed their bachelor's degree to complete a Master of Business Administration degree in one year of daytime study. This minor is for undergraduate non-business majors only. Since there are some differences for the Accounting and Health care Management M.B.A. options, it is highly recommended to consult with your academic advisor prior to enrolling in any classes. Students must be accepted into the M.B.A. program before registering for graduate courses and may begin taking graduate courses only in the senior year.

Non-Business majors interested in the Joint B.S./M.B.A. Program should obtain a copy of the "Pre-M.B.A. Requirements for Non-Business Majors: Planning Guide." The planning guide should be used in combination with the University catalog and the check sheet for the student's undergraduate major. The Guide describes the requirements for admission and the application process as well as the Pre-M.B.A. course requirements. Planning guides are available from upper-level advisors as well as the Office of Graduate Studies in the College of Design, Engineering and Commerce.

MGMT-301 Principles of Management

MGMT 104 Management Foundations (for DEC students only)

MGMT-401 Operations Management (or MBF-510)

MKTG-102 Principles of Marketing

MKTG-104 Marketing Foundations (for DEC students only)

FINC-301 Financial Management (or MBF-505)

MBF-503 Foundations of Economic Analysis

MBF-504 Introduction to Financial and Managerial Accounting

MBF-508 Statistical Analysis for Business Decisions

MBA-625 Management Communications and Negotiations

MBA-628 Accounting for Management Decisions

- Course numbers under 500 indicate that the course is an undergraduate business course.

- Course numbers beginning with “MBF” indicate graduate master-level foundation courses, and course numbers beginning with “MBA” indicate graduate master-level courses.
- Courses in parentheses are acceptable equivalents to those that precede them.

**Pre-Occupational Therapy Concentration** **21 credits**

Occupational therapy is a health care profession that helps people to maximize their functional independence after illness or injury. Occupational therapists (OTs) assist children with motor and learning needs to participate in school and everyday tasks. They help adults to develop strategies to manage the physical and emotional changes associated with long term health needs. Therapy frequently involves assisting individuals to relearn old skills, develop new skills or adapt the environment to enable them to live more satisfying and independent lives.

BIOL-104/	
BIOL-104L	Biology II lecture/lab
PSYCH-213	Developmental Psychology
BIOL-201/	
BIOL-201L	Human Anatomy & Phys I lecture/lab
BIOL-202/	
BIOL-202L	Human Anatomy & Phys II lecture/lab

Two additional Psychology courses.

**Professional Communication Minor** **12 credits**

A Professional Communication minor will enhance students’ capacity to think critically and communicate effectively. The minor offers practical, professional experience and hands-on projects. With a minor in professional communication, for example, you will be equipped to write and edit the copy, design and publish a brochure and give an effective presentation on your work. These skills are in high demand among today’s employers.

COMM-100	Introduction to Professional Communication (required)
COMM-105	Design as Communication (required)

Take the 2 required courses above plus choose two of the following courses:

Suggested Combination 1:

This combination might work well for someone majoring in design or a business major in finance or FIM. It is recommended for students interested in careers that focus on writing and creating documents such as brochures, proposals or instruction manuals.

COMM-200	Reading the Visual
COMM-303	Technical Writing

Suggested Combination 2:

This combination might work well for someone majoring in marketing. It is suggested for students who are interested in careers that focus on speaking and presentation skills.

COMM-204	Technologies of Communication
COMM-305	Multimedia Presentations

Or Create Your Own Combination:

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Choose 2 of the following courses to complete the four course requirement:

COMM-200	Reading the Visual
COMM-204	Technologies of Communication
COMM-303	Technical Writing
COMM-305	Multimedia Presentations
COMM-307	Public Relations and Media Writing

**Psychology Minor**

**12 credits**

All disciplines in the social sciences analyze human behavior on one level or another. Psychology's uniqueness lies mainly in the fact that it is an experimental science. Students who minor in Psychology will study a body of knowledge about the causes of human and animal behavior and the experimental methods used to study behavior. Students completing this minor should be better able to understand their own behavior and the behavior of others, in both work and leisure settings.

PSYCH-101 Introduction to Psychology (required)

Any three Psychology courses (chosen in consultation with a psychology faculty member)

**Public Health Minor**

**12 credits**

Public health may be an excellent minor for students in a variety of majors such as Environmental and Conservation Biology, Pre-medical Studies, Economics, Biology, Engineering and Environmental Sustainability. The requirements for a minor in public health would be:

PUBH-101	Introduction to Public Health
PUBH-201	Introduction to Epidemiology
ECBIO-101	Environmental Issues
XXX-XXX	Public Health Related Elective Course

Public Health Related Electives: PSYCH-222, PSYCH-224, PSYCH-243, SUST-120, DMM-643, ECBIO 303. Other courses in the Environmental Sustainability major (i.e. SUST-400), Junior Seminar in Health Policy offered by the SBA JSINT-310 and new courses in development from the SSH (Introduction to Nutrition, Principles of Exercise, Global Health and Global Climate Change) would also be future options for electives.

**Social Sciences Minor**

**12 credits**

College Studies requirements plus four additional courses approved by the College Studies Academic Associate Dean. Please see the office of the College Studies Academic Associate Dean for more information.

**Textile Materials Technology Minor****12-16 credits**

The TMT minor offers students an introduction to the process flow of fibers through finished products. A four-course sequence of courses will give a student the opportunity to understand the interdisciplinary nature of textile materials in a wide variety of disciplines and their potential capabilities and limitations.

Select one of the following:

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TEXT-101 Survey of the Textile Industry

TEXT-104 Fiber and Yarn Studies

Select any three of the following:

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KNIT-201 Knit Technology I

KNIT-205 Knit Technology II

WEAV-201 Weave Technology I

WEAV-301 Weave Technology II

TEXT-321 Nonwovens

TEXT-301 Textile Materials or

TEXTCHM-242 Dyeing & Finishing or

TEXT-301 Coloring and Finishing

TEXTCHM-338 Organic/Textile Chemistry



## Undergraduate Course Descriptions

This letter/number system is used to designate the colleges and the disciplines and subjects offered within these colleges.

### Key to Course Description Information

Before registering for a course, students must satisfy prerequisites as indicated in the following course descriptions. When changes are made, students are to follow the requirements in the most recent catalog.

#### Course Prefix

ACCT	Accounting
ADFND	Architecture Design Foundation
AENGR	Architectural Engineering
AHIST	History of Architecture & Interiors
ANIM	Animation
ARAB	Arabic
ARCH	Architecture
ARCHDSN	Architecture Design
ARCST	Architectural Studies
AREAST	Area Studies
ARTH	Art History
ARTS	Arts and Culture
BCHEM	Bio Chemistry
BEHLT	Behavior Health
BIOL	Biology
BLAW	Business Law
BUS	Business
CAD	Computer-Aided Design
CHEM	Chemistry
CHINE	Chinese
CMGT	Construction Management
CMPR	Computing
COLLST	College Studies
COMM	Communications
CSSEM	Continuing Studies Seminar
DECFRM	DEC Frameworks
DECPROC	DEC Process



DECMTHD	DEC Methods
DECSYS	DEC Systems
DIGD	Interactive Design & Media
DRAW	Drawing
DSGN	Design
DSGNFND	Design Foundations
ECBIO	Environmental Science
ECON	Economics
EDVS	Environmental Design and Visual Studies
EMS	Emergency Services
EMT	Emergency Medical Technician
ENGR	Engineering
FASHDES	Fashion Design
FASHDRW	Fashion Drawing
FASHMGT	Fashion Management
FIM	Fashion Industry Management
FINC	Finance
FREN	French
GER	German
GRAPH	Graphic Design Communication
HIST	Historical Understanding
HLTSV	Health Services
HSCI	Health Sciences
HONOR	Honors Program
HRM	Human Resources
HUMN	Humanities
IENGR	Industrial and Systems Engineering
INDD	Industrial Design
INTD	Interior Design
INTRN	Internship
IT	Information Technology
ITAL	Italian
JAPN	Japanese
JSINT	Junior Seminar: Integrative Professional Seminar
JSLA	Junior Seminar: Liberal Arts Seminar
KNIT	Knitting

LANG	Language
LARCH	Landscape Architecture
LAW	Law
LAWEN	Law Enforcement
LHS	Leadership & Homeland Security
LIT	Literature
MATH	Mathematics
MBB	MBA Pilot Bridge Program
MENGR	Mechanical Engineering
MGMT	Management
MIS	Information Systems
MKTG	Marketing
MMW	Midwifery (GR)
MSID	Industrial Design (GR)
OCC	Occupational Therapy (GR)
OTA	Occupational Therapy Assistant (CPS)
PAS	Health Sciences/Physician Assistant Studies
PE	Physical Education
PHOTO	Photography
PHYS	Physics
PRINT	Print Design
PSYCH	Psychology
PUBH	Public Health
READ	Reading
SCI	Science
SERVE	Civic Engagement
SOC	Social Sciences
SPAN	Spanish
STAT	Statistics
STUAB	Study Abroad
SUST	Sustainability
TENGR	Textile Engineering
TEXT	Textile
TEXTCHM	Textile Chemistry
VSDS	Visual Studies: Design
VSDRW	Visual Studies: Drawing

WEAV	Weaving
WRTG	Writing

## Undergraduate Course Descriptions

**ACCT-101 (Formerly B403) 3-0-3**  
**Financial Accounting**

Designed to introduce all business students to the field of accounting, the course covers the fundamental principles of accounting, highlighting balance sheet and income statement presentation. Primary emphasis on accounting as a source of financial information, with procedural details kept to a minimum.

**ACCT-102 (Formerly B423) 3-0-3**  
**Managerial Accounting**

Objective analysis and interpretation of accounting information. Use of accounting information as a basis for planning, control and managerial decisions.

*Prerequisite: ACCT-101 (required for all business students)*

**ACCT-203 (Formerly B441) 3-0-3**  
**Intermediate Accounting I**

An in-depth study of basic accounting principles and theory followed by a detailed analysis of cash, receivables and investments (including the related revenue and expense transactions). Text supplemented with the current rulings of the AICPA.

*Prerequisite: ACCT-101*

**ACCT-204 (Formerly B442) 3-0-3**  
**Intermediate Accounting II**

Continues the analysis of a company's balance sheet with a study of inventories, fixed assets and liabilities. Text supplemented by current rulings of the AICPA.

*Prerequisite: ACCT-203*

**ACCT-303 (Formerly B443) 3-0-3**  
**Accounting Theory and Practice**

This course will enable students to study topics such as corporate entities, cash flow statements, pensions and leases; along with other material not covered in previous accounting courses.

*Prerequisite: ACCT-204*

**ACCT-309 (Formerly B463) 3-0-3**  
**Federal Taxes I**

This course examines the federal tax laws as related to individual income taxation. The textbook is supplemented by using the actual 1040 tax forms and the related supporting schedules. The course is open to all students.

*Prerequisite: ACCT-101*

**ACCT-316 (Formerly B461) 3-0-3**  
**Cost Accounting I**

This course includes study of job order, process and standard cost systems; cost-volume-profit analysis; absorption versus direct costing; inventory-control systems, including EOQ and JIT systems concepts;

relevant costing in decision making; time value of money concepts; and capital-budgeting theory and application.

*Prerequisite: ACCT-203*

**ACCT-325 (Formerly B466) 3-0-3**  
**Business Taxes-State and Federal**

An in-depth coverage of business taxes. Emphasis is placed on partnership, corporation and sub-corporations. Pennsylvania, New Jersey and Delaware tax laws will be examined.

*Prerequisite: ACCT-309*

**ACCT-381 (Formerly B499) 0-0-3**  
**Independent Study in Accounting**

Intensive independent study of a chosen subject. The student is expected to read a substantial number of major works in the field and to prepare a critical documented paper. See also the statement on Independent Study under "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Prerequisites: permission required, see appropriate form online on the University Registrar's web page [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

**ACCT-409 (Formerly B464) 3-0-3**  
**Auditing**

Principles, standards and procedures of auditing. Emphasis upon the public accounting profession, its current pronouncements, practices and problems.

*Prerequisite: ACCT-204*

**ACCT-412 (Formerly B465) 3-0-3**  
**Advanced Accounting**

This course includes study of business combinations and consolidated financial-statement preparation, foreign subsidiary operations, foreign transactions and government and not-for-profit industry accounting. The text is supplemented with current rulings of the AICPA.

*Prerequisite: ACCT-303*

**ADFND-101 (Formerly A111) 0-8-4**  
**Design 1: Interdisciplinary Foundation Studies**

This basic foundation course is required in the Architecture, Interior Design and Landscape Architecture curricula. It is an introduction to fundamental design principles and vocabulary, process methodologies and problem-solving strategies. Lectures and demonstrations will stress abstraction as a primary building block for future design studios.

**ADFND-104 (Formerly A122) 1-5-3**  
**Drawing 2for Architecture**

This is a drawing elective option. Drawing skills will be developed through rapid exploratory sketches and through complex three-dimensional studies that explore volumes/voids and light/shade with special references to architectural details and furniture. Investigation of space/form relationships through one- and two-point perspectives and through various drawing materials will be introduced.

*Prerequisite: DRAW-101*

**ADFND-110 (Formerly A124)** **1-5-3**  
**Painting from Perception**

Building on the foundation of the introductory drawing course, this elective course allows students to work from perception as they learn painting skills using acrylic and other water-based media. The course explores issues of composition with color and develops the student's sensibility toward the use of color. Subject matter includes still life, portraiture, figure, interiors and landscape.

*Prerequisites: DRAW-101, and ADFND-101 or DSGNFND-103*

**ADFND-112 (Formerly A125)** **1-4-3**  
**Technics of Communication**

The designed object is tangible, but it is always first an image. The image, the product of visualization, is most fundamentally communicated through the techniques of two-dimensional modeling we call drawing. Today's designer is privileged to own a vast range of technologies, ancient and modern, to devise comprehensive strategies for visualizing and communicating ideas. By integrating techniques the student will learn the appropriate tool to employ at any given point in the design process to effectively communicate to self and to others.

*Prerequisites: DRAW-101, grade of "C" or better in ADFND-101*

**AENGR-200** **0-8-4**  
**Architectural Engineering Design**

This foundation course is required for Architectural Engineering. It is an introduction to design principles, vocabulary and process methodologies leading to the understanding of architectural and research process. Use of prevalent and emerging visualization tools for building information modeling (BIM) including REVIT will be covered.

*Prerequisite: WRTG-101, ENGR-101, ENGR-102*

**AENGR-301** **3-0-3**  
**Structural Analysis I**

Structural Analysis I provides the basis and serves as a foundation for subsequent advanced Structural Analysis courses. Assumptions, principles of equilibrium in determining structures reactions, bending moments and shear diagrams will be discussed. Additionally, analysis of plane and space trusses, influence lines, computer analysis of determinate trusses, optimization in structural systems, approximate methods of analysis for indeterminate structures, determination of displacements by virtual work, and Castiglione's Theorem and moment area theorems will be taught.

*Prerequisites: ENGR 215*

**AENGR-303** **3-0-3**  
**Structural Design with Compression Elements**

The main objective of this course is to provide students with a rational basis of the design of reinforced concrete members and structures through advanced understanding of material and structural behavior. The subject will be approached by looking into the behavior of reinforced concrete at different levels – material level, element level and structural and systems level.

*Prerequisite: AENGR-301*

**AENGR-305** **3-0-3**  
**Structural Design with Tensile Elements**

The main objective of this course is to provide students with a rational basis of the design of tensile members, elements and structures through advanced understanding of material and structural behavior. The subject will be approached by looking into the behavior of steel, timber and fabrics at different levels – material level, element level and structural and systems level.

*Prerequisite: AENGR-301*

**AENGR-307** **3-0-3**  
**Soil Mechanics**

This course presents technical aspects of soil properties, identification and classification of earth materials, stress strain behavior of soils and movement of water through soils. The student will also be introduced to geotechnical design.

*Prerequisite: ENGR 301*

**AENGR-400** **3-0-3**  
**Mechanical and Electrical Systems for Buildings**

This course will introduce basic principles, types and applications of mechanical and electrical systems for buildings. Topics include air conditioning, heating, fire protection, electrical power and electrical lighting. Students will learn various design methods that impact building environment and indoor air quality.

*Prerequisite: ENGR 322*

**AHIST-205 (Formerly A331)** **3-0-3**  
**History 1: The Built Environment, Ancient to Medieval**

By tracing significant historical themes, this course spotlights canonic examples of Western and non-Western architecture, interiors and landscape design from Ancient times to the Medieval period. Major monuments of Europe, Asia, Africa and the Americas are examined as solutions to technical problems, utilizing available materials, and as spatial and structural embodiments of cultural belief systems. Students acquire a working vocabulary for both analyzing and evaluating the built environment and material culture.

*Prerequisite: WRTG-101*

**AHIST-206 (Formerly A332)** **3-0-3**  
**History 2: Renaissance/Baroque Architecture and Interiors (1300-1750)**

Focusing upon global changes relative to urbanism, patterns of patronage and the intersection of church and state, this course highlights significant examples of Western and non-Western architecture and interiors produced from the 14th through the mid-18th centuries. Each case study is situated within a broad historical context and understood as paradigmatic of a period's values and aspirations that are given concrete form through available materials, construction methods and technologies. Students acquire a working vocabulary for both analyzing and evaluating architecture, interiors, and material culture.

*Prerequisite: AHIST-205*

**AHIST-305 (Formerly A531)** **3-0-3**  
**History 3: Early Modern Architecture and Interiors (1750-1930)**

*(writing intensive)*

This course chronicles the impact of Enlightenment thinking and of the shifting definitions of modernity upon architecture and interior design by tracing the transition from Historicism to the International Style. New notions of progress and evolution; industrialization and urbanization; and debates concerning the role of the machine and the meaning of ornament are set against major technological advances. Students examine key theoretical texts and accomplish archival research on a historic structure in the Philadelphia area.

*Prerequisite: AHIST-206*

**AHIST-306 (Formerly A532) 3-0-3**  
**History 4: Modern/Contemporary Architecture and Interiors (1930-present)**

*(writing intensive)*

This course analyzes major movements and theoretical constructs that have dominated architecture and interior design from the post-World War II period until the present. Discussion focuses upon societal and environmental aspects — politics, economics, science and technology, psychology, etc. — that shape the greater context for architecture, interiors and the allied arts. Students examine key theoretical texts to evaluate current thinking relative to issues such as sustainability, critical regionalism, phenomenology and the role of the digital in contemporary practice.

*Prerequisite: AHIST-305*

**ANIM-201 1-5-3**  
**Introduction to Animation**

This course will introduce students to the practice of animation and the various techniques employed in its production. Short exercises involving hand-drawn, stop-motion and other non-digital means will serve to expose students to the fundamental concepts involved. Students will then apply these concepts to their digital toolkit in order to create a longer final project.

*Prerequisite: VSDES-101 and DRAW-101*

**ANIM-202 1-5-3**  
**Storytelling and Storyboarding**

This course will seek to give students a strong foundation in storytelling. Emphasis will be placed on visual storytelling, as the storyboard is the script for animation. In addition to story structure, students will explore screen composition and editing as means of relating narrative content. The class will consist of several storyboard exercises, culminating in the production of an animatic, a filmed version of the storyboard with a soundtrack.

*Prerequisite: ANIM-201*

**ANIM-301N (Formerly ANIM-301) 0-8-4**  
**Motion Graphics I**

This major studio course explores time and motion in the creation of primarily graphic narratives. The techniques of abstraction, motion typography and musical synchronization are studied in the context of increasingly complex projects. A major aspect of the course will be the screening of both abstract films and reels from contemporary motion graphics films.

*Prerequisite: ANIM-202*

**ANIM-303 3-0-3**  
**History of Animated Cinema**



*(writing intensive)*

This class will expose students to the range of animated cinema, from the early days of film to contemporary computer-generated work. Class will consist of screening and discussing a range of short and feature-length films. During the semester, students will be expected to write responses to the films as well as conduct further research into the medium and its history.

*Prerequisite: ANIM-202 or permission of the director of the Animation program*

**ANIM-307** **1-5-3**  
**3D Modeling**

This course will give students a foundation in the concepts and techniques of 3D modeling and rendering. Specific attention will be paid to modeling environments, objects and characters. Students will explore polygonal, NURBS and subdivision-surface modeling and their respective workflows.

*Prerequisite: ANIM-201*

**ANIM-308N (Formerly ANIM-308)** **0-8-4**  
**3D Animation**

This course builds upon the concepts learned in 3D modeling to include animation and character setup. Special attention will be given to applying the techniques of traditional character animation to this contemporary medium. Projects will range from short animation exercises to a longer, character-driven piece. In addition, the class will view and discuss current and classic animated film.

*Prerequisite: ANIM-307*

**ANIM-312** **1-5-3**  
**Motion Graphics II**

This class explores the concepts covered in Motion Graphics I but with the introduction of 3D graphics and video as elements of motion graphics. In addition, the mediums of dance, photography, architecture and painting will be discussed as possible inspirations.

*Prerequisites: ANIM-301N, ANIM-307*

**ANIM-407N (Formerly ANIM-407)** **0-8-4**  
**Advanced Topics in 3D Animation**

This class will allow students to delve deeper into areas covered in prior 3D classes. Topics include advanced modeling techniques, character setup, special effects, dynamics, lighting and rendering. The creation of a character interacting with its environment will drive the projects in this class.

*Prerequisite: ANIM-308N*

**ANIM-497N (Formerly ANIM-487)** **0-12-6**  
**Animation Capstone I**

*(writing intensive)*

This course focuses on preparing the student to create a short film as their Capstone Project. The pre-production phase includes conceptualizing the story, writing the script and creating storyboards. In the process of preparing, students will also learn to schedule, budget and distribute their film. Before the end of the semester, students will have all the necessary materials to begin production on their short film.

*Prerequisites: ANIM-312, ANIM-407*

**ANIM-499N (Formerly ANIM-499)**  
**Animation Capstone II**

**0-12-6**

This course represents the culminating experience for Animation students. Students are required to produce and deliver a short film, realizing the concepts they developed in the previous semester and synthesizing the knowledge and skills from the preceding courses. In addition, students will be required to produce a finished portfolio appropriate to the industry in which they will be pursuing further work.

Prerequisite: ANIM-497N

**ARAB-101 3-0-3**

**Arabic I**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**ARAB-201 3-0-3**

**Arabic II**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**ARCH-102 (Formerly A112)**

**0-8-4**

**Design 2: Architecture Foundation Studies**

This basic foundation course is required in the Architecture and Historic Preservation and Visual Studies curricula. It is a synthesis of fundamental design principles and an introduction to research as a tool for understanding programming and design. Lectures and demonstrations will utilize the case-study methodology to investigate various design strategies and to chart the historical course of modernism.

*Prerequisite: grade of "C" or better in ADFND-101*

**ARCH-201 (Formerly A311)**

**0-8-4**

**Design 3: Architecture Foundations Studies**

This foundation course focuses on building the landscape using the elements, principles and theories of architectural and landscape design. Concurrently, specific theoretical issues related to design, organization and the interrelationship of interior and exterior space are explored. A particular emphasis is placed on an experiential and intuitive design process. The importance of the building "parti" as a

response to naturally occurring context is stressed. Techniques of representation are developed and refined.

*Prerequisite: grade of "C" or better in ARCH-102*

**ARCH-202 (Formerly A312) 0-8-4**  
**Design 4: Architecture Foundations Studies**

This foundation studio concentrates on general issues concerning "dwelling" and specific issues addressing housing and residential design are explored. Emphasis is placed on designing in the urban context. This course uses research and analysis of human patterns of occupancy and settlement as a means of exploration.

*Prerequisite: grade of "C" or better in ARCH-201*

**ARCH-204 3-0-3**  
**Great Buildings: Structure, Style and Context**

This course surveys selected, key monuments of architectural history from ancient through modern times that are paradigmatic of building art and science during a particular period. The buildings spotlighted represent dominant "types" from pyramids to skyscrapers that are not only laboratories for innovative design and cutting-edge technologies, but also are expressive of the values and aspirations of the society at large. Developments in the areas of materiality and structural systems will be integrated with changing social, economic, political, stylistic and environmental demands that are normative of a particular time and place. Students majoring in Architecture, Historic Preservation and Visual Studies, Landscape Architecture or Interior Design are not permitted to take this course.

*Prerequisite: WRTG-101*

**ARCH-212 (Formerly ARCH-211, A342) 2-2-3**  
**Technology 2: Passive Systems and Building Enclosure**

This lecture/lab course examines technological issues relevant to passive environmental systems and sustainable technologies. Central to the course is a student's understanding of the temporal nature of program and site and their impact upon the design of natural lighting, passive heating and cooling systems and issues of enclosure, materiality and skin, as well as their relation to our natural and built environments. (first offered spring 2011)

*Prerequisite: ARCHDSN-210*

**ARCH-303 (Formerly ARCH-309, A541) 2-2-3**  
**Structures 1**

This course merges structural design (form) and analysis as a simultaneous act and introduces the role of structural engineering in the architectural process. Students develop familiarity with the fundamentals of statics, gain a sense of how structures resist forces and learn to visualize the load path and the direction of forces. Material is learned while designing actual structures and details. Structural design and analysis is taught using both numerical and graphical analyses for the preliminary shapes of cable structures, arches, and trusses. (first offered spring 2011)

*Prerequisites: MATH-103 or MATH-111, PHYS-101*

**ARCH-304 (Formerly ARCH-310, A542) 2-2-3**  
**Structures 2**

Reinforcing concepts learned in Structures 1, this course presents the effect of cross-sectional properties on stresses in beams as well as the concept of bending as it is applied to beams, columns, slabs and

walls in wood, steel and reinforced concrete. Also covered are the resistance of buildings and their components to lateral loads (wind and earthquake) and the introduction to structural grids and patterns for structural systems in wood, steel and concrete as they relate to gravity and lateral loads. (first offered fall 2011)

*Prerequisite: ARCH-303*

**ARCH-311** **0-12-6**  
**Design 5 for Architecture**

This topical studio explores the integration between individual buildings and urban design. The course focuses on creating community within the city. Students investigate socio-cultural and environmental aspects of the city as they relate to architecture. The studio includes discussion of architectural history, theory and principles as the basis for the making of architecture and urban form.

*Prerequisites: 5-year B.Arch major, ARCH-212, grade of "C" or better in ARCH-202*

**ARCH-312** **0-12-6**  
**Design 6 for Architecture**

This tectonics studio focuses on the theories surrounding the materials and processes of making architecture. Students investigate the inherent properties of building materials to understand their roles in informing and directing the design process. They explore methods of structure, enclosure, and assembly to analyze their effect on built form.

*Prerequisites: 5-year B. Arch major, ARCH-212, grade of "C" or better in ARCH-202*

**ARCH-313 (Formerly ARCH-403, A741)** **2-2-3**  
**Technology 3: Dynamic Environmental Systems**

This lecture/lab course presents basic theory and application parameters associated with the dynamic building systems within the architectural environment. These include HVAC, power and data, lighting, acoustics, security, plumbing, vertical transportation and life and fire safety. Emphasis is placed on the relationships of these systems within the building structure and envelope, as well as the integration of design processes, the implementation of sustainable design principles, and the health, safety and welfare of users.

*Prerequisite: ARCH-212*

**ARCH-314 (Formerly ARCH-404, A742)** **2-2-3**  
**Technology 4: Advanced Building Analysis**

This lecture/lab is the capstone course to the Structures and Technology course sequences. This course presents advanced theory, design and application parameters associated with structures, environmental systems and enclosure within the architectural environment. These parameters are examined through the context of building form typology. Emphasis is placed on the relationships of structures, environmental systems and building enclosure within each building type, and the use of these design elements in the conceptualization and realization of architecture.

*Prerequisite: ARCH-313*

**ARCH-320** **3-0-3**  
**Ecology and Making**

The objective of this seminar is to broaden the base of understanding relative to the current discussion of sustainability and reveal some of the greater complexities of the topic. The course will include relevant design work, work outside of the realm of convention, and non-designers that have contributed

greatly to the field. The semester's readings will explore the topic through different filters: technological, historical, philosophical, aesthetic, scientific, social, economic, political and cultural.

*Prerequisites: AHIST-306 or LARCH-411 or INDD304*

**ARCH-321 (Formerly A618) 3-0-3**

**Itineraries of European Contemporary Architecture**

During the period of the 1960s through the 1970s, architecture was both very radical and very expensive with only a few examples on the European landscape. Since the beginning of the 1990s, this has changed and Europe is showing strong signs of renewed vitality with an increasing number of outstanding buildings and bridges. This course will explore the different cultural, social, political and economic reasons associated with these changes in a variety of locations throughout Europe.

*Co-requisite: STUAB-300*

**ARCH-324 (Formerly A624) 1-4-3**

**Visualization: Experimental Modeling**

This advanced digital elective course focuses on the direct correlation between digital techniques and the design process. Complex three-dimensional modeling, rendering, animation, design visualization and presentation are emphasized in the course methodology. Using a variety of software, students complete a series of exercises of increasing difficulty leading to a final project that demonstrates the culmination of the skills developed throughout the semester.

*Prerequisite: ARCHDSN-208*

**ARCH-326 (Formerly A623) 1-4-3**

**Visualization 2: Advanced Modeling**

This advanced, computer-aided design course focuses on complex three-dimensional modeling, photo-realistic rendering and virtual reality; with an emphasis on using 3-D Studio Advanced modeling and rendering software. Interactive media and digital imaging are introduced in order to increase the effectiveness of student presentations. Students complete a series of specifically designed exercises of increasing difficulty leading to a final project of the student's choosing from a concurrent or earlier design studio.

*Prerequisite: ARCHDSN-208*

**ARCH-401 0-12-6**

**Design 7 for Architecture: Studio Options**

This studio permits students to customize their professional education by offering a series of options, including study abroad architectural studio, design-build studio, interdisciplinary studio, design studio within another discipline or another option approved by the program director.

*Prerequisites: grade of "C" or better in both ARCH-311 and ARCH-312*

**ARCH-412 0-12-6**

**Design 8 for Architecture**

This comprehensive course demands that students work in teams integrating constructional structural and environmental systems in the design and documentation of a large and complex building. Students research building type and systems precedents and their resulting impact on built form, analyze material properties, specify component building systems and apply codes and standards to fulfill technical, programmatic and aesthetic needs.

*Prerequisites: ARCH-314; grade of "C" or better in both ARCH-311 and ARCH-312 Co-requisite: ARCH-416*

**ARCH-413 (Formerly A841) 2-2-3**  
**Experimental Structures**

This elective lab/seminar course is an exploration into the architectural potential of form-active structures (including thin-shell, tensile-membrane and fabric structures), and new and alternative materials and methods of construction. Unlike conventional structures that rely on their internal rigidity, form-active structures rely purely on their geometric shape to carry loads, thus providing a base for experimenting with form to create innovative solutions for structural-design problems.

*Prerequisite: ARCH-304 or AENGR-305*

**ARCH-414 (Formerly A844) 2-2-3**  
**Experimental Materials**

This elective lab/seminar course is a hands-on exploration into the mechanical properties and aesthetic potential of materials in the built environment. The course encourages experimentation with both new materials and non-traditional use of existing materials toward the full-scale production of architectural objects and building components. Implications of craft and technology underscore research and production. Students complete several smaller individual projects and a larger group project of longer duration.

*Prerequisite: ARCH-303 or AENGR-301*

**ARCH-415 (Formerly A628) 1-4-3**  
**Visualization: Multimedia**

This interdisciplinary course focuses on Interactive CD-ROM design, web page design and digital-video production. Students begin by reviewing basic two-dimensional, design-communication concepts as a prelude to more complex projects involving various digital media. The course is primarily taught on the Macintosh platform and features software such as Adobe Premier, Macromedia Flash and Macromedia Director. Students create their own individualized final project as approved by the instructor.

*Prerequisite: ARCHDSN-208 or GRAPH-202*

**ARCH-416 (Formerly ARCH-511, A845) 1-4-3**  
**Technology 5: Documentation and Detailing**

This course focuses on the important role of structural, environmental, and constructional systems in the design process through the creation of technically precise computer generated drawings and models. Students systematically analyze precedence through case studies and develop their own design into a set of technical documents and details that enhance the project concept. The utilize CAD and BIM computer software to convey their technical design intentions.

*Prerequisites: ARCH-314; ARCH-326 Co-requisite: ARCH-412*

**ARCH-418 (Formerly A842) 3-0-3**  
**Housing and Construction Technology**

This elective seminar course explores interrelated issues of housing, land and construction. Discussions and research center around how historical and cultural concepts of the home- and land-use have brought housing to its present condition, and how current concerns about land use and construction technologies might effect a change.

*Prerequisite: ARCH-212 or LARCH-207*

**ARCH-423 0-8-3**  
**Architecture Fellowship**

This course is designed to allow students to take the first step towards learning to be a teacher. During the semester students will be linked one-to-one with a section of a foundation design studio. Participation in desk critiques and the review process, as Studio Assistants rather than as the student, allows upper level students the opportunity to share their knowledge with foundation students. In return by revisiting the fundamentals as a Studio assistant, students will be able to reevaluate the work they are doing in their own coursework and to develop further their critical, analytical, speaking and communication skills.

**ARCH-426 (Formerly A636) 1-4-3**  
**Design/Build**

Through a combination of lecture and lab, students apply knowledge of building technologies and structural systems to the design and construction of a project at appropriate scale. Working under the supervision of faculty, students research, plan and build their solution to a problem of topical interest.

*Prerequisite: ARCH-212 or LARCH-207*

**ARCH-430 (Formerly A637) 1-4-3**  
**Architecture in Education**

Each student is teamed with a practicing architect and a classroom teacher to develop and carry out an eight-week program for a class of school children (elementary through high school). The emphasis is on hands-on activities and direct experiences (neighborhood walks, etc.) that introduce the children to the basic principles of architecture and the built environment. The program is in collaboration with the Foundation for Architecture, the Philadelphia Public School District and local architecture firms.

*Prerequisites: ARCH-202 or LARCH-202; WRTG-215; and the ability to travel to sites away from campus*

**ARCH-431 (Formerly A762) 0-2-1**  
**Portfolio Presentation**

This course focuses on the evaluation, documentation, layout and formal presentation of the student's work. Writing and verbal skills are emphasized as an important aspect of presenting a portfolio. Various graphic techniques are introduced.

*Prerequisites: grade of "C" or better in both ARCH-311 and ARCH-312 or LARCH-302; or grade of "C" or better in INTD-401*

**ARCH-499 1-4-3**  
**Construction Capstone Project**

This course develops a higher level understanding of the construction process by examining the problem solving that begins with conception and progresses through the completion, start-up and maintenance of a project. Utilizing the technical design drawings that students completed in ARCH-324 Visualization: Experimental Modeling and generated through Building Information Modeling (BIM) software, this course provides an opportunity to simulate the progressive stages of a construction project, thereby synthesizing knowledge and skills acquired in previous coursework.

*Prerequisites: ARCH-428, ARCH-324*

**ARCH-503 (Formerly ARCH-505, ARCH-506)      3-0-3**  
**Professional Management**

This course focuses on the nature of the architect's practice and on office proprietorship typologies, through detailed studies of legal, financial, marketing and management issues. Using individual projects, it examines the project process – from development through construction, including administrative procedures, economic systems, codes, standards and regulations – as well as various professional disciplines' responsibilities and requirements for professional registration. Contractual and ethical obligations of the architect, particularly in response to client needs and safety, as well as codes, standards and regulations are covered. (first offered Fall 2013)

*Prerequisites: grade of "C" or better in both ARCH-311 and ARCH-312 or LARCH-302*

**ARCH-507      0-12-6**  
**Design 9 for Architecture**

This studio combines seminar and workshop elements in a non-linear manner to allow students to develop the architectural agenda explored in their position papers done for the required theory seminar. Students engage in a rigorous process uniting research, analysis, and design. Each studio section is topical according to the curricular streams identified in the students' work. It is the first half of a year-long sequence. (first offered Fall 2013)

*Prerequisites: grade of "C" or better in ARCH-412; grade of "C" or better in one of the following: ARCH-320, EDVS-221, EDVS-341, EDVS-410, EDVS-422, EDVS-471, PHOTO-307 or another course approved by the program director.*

**ARCH-508      0-12-6**  
**Design 10 for Architecture**

The second half of a two-semester sequence, this course allows students to complete their architectural agenda, resulting in a thorough public presentation before a jury of faculty and professionals. (first offered Spring 2014)

*Prerequisite: grade of "C" or better in ARCH-507*

**ARCHDSN-208 (Formerly A321)      1-4-3**  
**Visualization 1: Digital Modeling**

The primary intent of this course is to establish the computer as an effective tool in the design and presentation process. The course will focus on two primary areas in this regard: visualizing design concepts in three dimensions and communicating those concepts in a manner consistent with studio level work. Each project will explore various methods of describing two and three dimensional objects and spaces.

*Prerequisite: grade of "C" or better in ARCH-102 or grade "C" or better in INTD-102*

**ARCHDSN-210 (Formerly A341)      2-2-3**



## **Technology 1: Materials and Methods**

This course focuses on the presentation of the technical factors of construction that affect a building's structure. Students are introduced to and compare the nature and structural characteristics of the major construction systems of wood, masonry, steel and concrete. Structural principles, as well as building and zoning codes, are introduced and their influence on form and choice of materials is emphasized.

*Prerequisite: grade of "C" or better in ARCH-102, or INTD-102, or AENGR-200*

### **ARCHDSN-214 (Formerly A602) 2-2-3** **Model Building**

This elective course focuses on the visualization of ideas in three dimensions. Fundamentals of model building are studied from a perspective that stresses the relationship between the design process and the application of current model-building techniques. Assignments emphasize the development of skills necessary to construct models and the ability to budget for time and materials. Mock-ups, quick sketch models and final presentation models are stressed.

*Prerequisite: grade of "C" or better in ADFND-101*

### **ARCHDSN-381 (Formerly A999) 0-0-3** **Independent Study in Architecture, Interior Design and Landscape Architecture**

For further details, see general description of Independent Study in ""University Academic Policies and Procedures: Common Academic Policies for All Students"" section.

Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

### **AREAST-201 (Formerly L351) 3-0-3** **Europe**

A multidisciplinary study of European society, history and culture with emphasis on the 20th century. Through a variety of materials and approaches including fiction, visual sources, political commentary and cultural artifacts, this course will examine the rise of the European community and the continuing conflict between ethnic, cultural and political forces in the region.

*Prerequisite: WRTG-101, HIST-11X*

### **AREAST-201S** **Contemporary Europe (Study Abroad) 3-0-3**

A multidisciplinary study of European society, history and culture with emphasis on the 20<sup>th</sup> century. Through a variety of materials and approaches including fiction, visual sources, political commentary and cultural artifacts, this course will examine the rise of the European community and the continuing conflict between ethnic, cultural and political forces in the region. This study abroad course is taught in Europe.

*Prerequisite: WRTG-101, HIST-11X*

### **AREAST-202 (Formerly L352) 3-0-3** **Latin America**

A multidisciplinary introduction to Latin American history, society and culture through a variety of materials including literature, film, music, journalistic accounts and history with emphasis upon the 20th century. The course will emphasize the complex interplay between indigenous, Iberian and African

influences in the forging of the continent's past, present and future. Students will examine the roots of everyday and state violence, as well as the current controversies over "liberalization" and "market" economies.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-205 (Formerly L353) 3-0-3**  
**East Asia**

A multidisciplinary course examining the shifting relationship between "tradition" and "modernity" in East Asia. The course will explore such topics as kinship, gender relations and stratification systems in the Asian past and present. Students will investigate some of the different paths of development that Asian societies have followed in the last two centuries including communism and state-directed capitalism. The course will close with Asia's increasing significance in the globalization of capitalism.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-208 (Formerly L354) 3-0-3**  
**Africa**

A multidisciplinary introduction to African civilization through a variety of sources including oral epics, film, music, literature, ethnographies, historical studies and visual materials with emphasis upon the 20th century. The course will investigate such topics as the cultural roots of African leadership, the enduring importance of family and community, the impact of the trans-Atlantic trade in human beings on African societies, the struggle to achieve a just, multi-ethnic society in Southern Africa and the present continent-wide democratization process.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-210 (Formerly L355) 3-0-3**  
**Middle East**

The contemporary Middle East will be examined from an interdisciplinary perspective, including the region's history, geography, politics, economy, religions and cultures with emphasis upon the 20th century. The course aims to promote an understanding of the social dynamics of this region, as well as to provide the basic tools for a better understanding of world events in general.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-220 (Formerly L356) 3-0-3**  
**Great Britain: Study Abroad Preparation**

An interdisciplinary study of Great Britain (England, Scotland, Wales and Northern Ireland) including social, political, economic and cultural issues with particular emphasis on the post-1945 period. Students will also learn how to understand cultural difference and to cope with culture shock. This course prepares students for study abroad programs in Great Britain. Open to all students.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-226 3-0-3**  
**Italy: Study Abroad Preparation**

A multidisciplinary study of Italy including social, political, economic and cultural issues with particular emphasis upon the post-1945 period; attention is given also to Italy's role in Europe. The course also introduces students to how to learn a language and basic communication skills in Italian needed to cope

with daily living in the society, with a special emphasis on issues relating to “culture shock” when living, working and studying in Italy.

*Prerequisite: WRTG-101, HIST-11X*

**AREAST-227** **3-0-3**  
**India and South Asia**

A multidisciplinary introduction to the Asian Subcontinent, including the countries of India, Pakistan, Bangladesh and Sri Lanka. The region’s modern history, geography, politics, economies, religions, cultures and social issues are each discussed in an integrative manner. Regional popular culture, including modern music, literature and cinema, are also analyzed in order to help students understand the rapidly changing nature of this region today.

*Prerequisites: WRTG-101, HIST-11X*

**AREAST-383 (Formerly L949)** **0-0-3**  
**Independent Study in Area Studies**

See the statement on Independent Study in the “University Academic Policies and Procedures: Common Academic Policies for All Students” section.

Permission required. Also see appropriate form online at the University Registrar’s webpage <http://www.philau.edu/registrar/> for more information.

**ARTH-101 (Formerly T771)** **3-0-3**  
**History of Western Art I**

The evolution of Western painting, sculpture and architecture from pre-history to the 16th century is covered. A thorough foundation in art and ideas with special emphasis on styles is presented as inspiration for designers.

**ARTH-102 (Formerly T772)** **3-0-3**  
**History of Western Art II**

The evolution of Western painting, sculpture and architecture from the 16th century to the present is covered with the same emphasis on styles.

**ARTH-314 (Formerly T773)** **3-0-3**  
**History of Textiles and Costumes**

A multi-faceted survey of textiles and costumes from ancient cultures to the present, technical- and visual-design aspects of the textile arts, the influence of trade on design trends, styles in period costume and the sociological implications of dress are all incorporated.

*Prerequisite: VSDES-101 or FASHDES-2XX or FASHDES-423*

**ARTS-101 (also listed as DECPROC-101)** **1-5-3**  
**Integrative Design Process**

Design thinking is a shared process and key component of innovation for all fields within the College of Design, Engineering and Commerce. In this course, students will develop and refine abilities to construct, analyze and use the process of designing within an interdisciplinary, team based environment. Integrative Design Process is a part of the DEC core and is a mandatory course for all students in the College of Design, Engineering and Commerce. This course fulfills the Arts and Cultures requirement of the College Studies Program for students enrolled in the majors in the School of Business Administration and for students enrolled in majors in the College of Science, Health and the Liberal Arts.

**ARTS-105 (Formerly HUMN-105 and L155) 3-0-3**

**Music**

Music is an important form of human expression and creativity. This course combines music appreciation with attention to why certain societies produced kinds of music. Previous knowledge of music is not required.

**ARTS-120 (Formerly HUMN-120 and L151) 3-0-3**

**Performing Arts**

The purpose of this course is to help students acquire a critical appreciation both for the process of creating various forms of art and for the final products in theater, musical theater, opera and dance. The course will also explore how aesthetic values are influenced by society. Students will be required to attend professional performances in the Philadelphia area.

**ARTS-123 (Formerly HUMN-123 and L152) 3-0-3**

**Ideas and Images**

Beginning with analysis of basic visual and compositional elements, students will discover how artists and designers have created images that express and reflect cultural values. Historical and cross-cultural connections are emphasized in seminar approach. May not be taken by any design or architecture major. This course may be used to satisfy a College Studies requirement, but not free elective credits.

**BCHEM-312 (Formerly S215) 3-0-3**

**Biochemistry I**

Biochemistry I introduces the student to protein chemistry, protein structure/function relationships and basic enzymology. It also covers chemistry of carbohydrates and lipids with particular emphasis on human metabolism of these compounds.

*Corequisite: BIOL 312L;*

*Prerequisite: grade of "C" or better in CHEM-202 and CHEM 202L*

**BCHEM-312L 0-4-1**

**Biochemistry I Lab**

*Biochemistry I lab* introduces some basic techniques used routinely in a biochemistry research setting including protein purification, enzyme kinetics and carbohydrate chemistry.

*Corequisite: BIOL 312;*

*Prerequisite: grade of "C" or better in CHEM-202 and CHEM 202L*

**BCHEM-313 (Formerly S216) 3-0-3**

**Biochemistry II**

Biochemistry II continues the metabolic theme of Biochemistry I with emphasis on nitrogen-containing compounds (amino acids, urea cycle and nucleotide biosynthesis). Also considered are biological membranes, transmembrane transport and signaling. The course concludes with the biochemistry of polynucleotides (DNA and RNA) and protein biosynthesis and trafficking.

*Corequisite: BIOL 313L;*

*Prerequisite: grade of "C" or better in BIOL-312 and BIOL 312L*

**BCHEM-313L**

**0-4-1**

**Biochemistry II Lab**

*Biochemistry II lab* continues the theme of Biochemistry I lab with studies on carbohydrate chemistry, lipid chemistry and handling of polynucleotides.

*Corequisite: BIOL 313;*

*Prerequisite: grade of "C" or better in BIOL-312 and BIOL 312L*

**BIOL-101 (Formerly L311) 3-2-3**  
**Current Topics in Biology**

*(for non-science majors)*

Explore *contemporary biological* topics that you hear and read about or that are part of your daily life and learn the fundamental scientific concepts that underlie them. Topics will cover molecules to cells and organisms to populations as well as inheritance, development, infectious disease and what constitutes well-supported science. The course utilizes projects, hands-on activities, online discussions and group work to illustrate concepts.

**BIOL-103 (Formerly L323) 3-0-3**  
**Biology I**

*(required for Science majors)*

The objective of this course is to gain an understanding of the cellular, molecular and genetic basis of life. Students will be introduced to the physical and chemical principles involved in biological processes, the microscopic world of the cell, regulation of gene expression and the laws that govern inheritance. This course and BIOL-104 and BIOL-104L Biology II are the introductory courses for science majors.

*Co-requisite: BIOL-103L*

**BIOL-103L (Formerly L323) 0-3-1**  
**Biology I Laboratory**

This laboratory course reinforces the understanding of cellular, molecular and genetic processes learned in Biology I lecture. Exercises include microscopic examination of cells and tissues, biochemical analysis of enzyme activity, osmosis, cellular respiration and genetic investigation, including electrophoretic analysis of mutation.

*Co-requisite: BIOL-103*

**BIOL-104 (Formerly S212) 3-0-3**  
**Biology II**

*(for science majors)*

In this course students will apply the principles learned in Biology I to the structure and function of organisms. Physiological processes that will be examined include nutrition, gas exchange, transport and regulation of body fluids, chemical and nervous control and reproduction.

*Co-requisite: BIOL-104*

*Prerequisite: grade of "C-" (1.67) or better in BIOL-103 and BIOL-103L*

**BIOL-104L (Formerly S212) 0-3-1**  
**Biology II Laboratory**

*Co-requisite: BIOL-104*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-103 and BIOL-103L*

**BIOL-201 (Formerly S218) 3-0-3**  
**Human Anatomy and Physiology I**

This course is the first of a two-semester sequence. This course will examine anatomical and physiological aspects of the following systems of humans: tissues, integumentary, musculoskeletal and neurologic. A close correlation between lecture and laboratory topics will be maintained. During lecture,

both anatomy and physiology will be discussed however greater emphasis will be placed on the physiology of each system while during the laboratory session, greater emphasis will be placed on anatomy.

*Co-requisite: BIOL-201L*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-201L (Formerly S218) 0-2-1**  
**Human Anatomy and Physiology I Laboratory**

The A&P laboratory sessions will provide students with hands-on learning opportunities to help conceptualize content discussed in lecture. During lab, students will work on problem sets, examine and dissect organs and/or anatomical models, use microscopes, perform basic physiological experiments and examine cadaver specimens. During laboratory sessions of the first half of this two-semester course, emphasis will be placed on the anatomy of the relevant system.

*Co-requisite: BIOL-201*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-202 (Formerly S219) 3-0-3**  
**Human Anatomy and Physiology II**

This course is the second of a two semester sequence. This course will examine anatomical and physiological aspects of the following systems of humans: sensory, endocrine, circulation, respiration, nutrition-digestion, excretion and reproductive. During lecture, both anatomy and physiology will be discussed. While some lab sessions will focus mainly on the anatomy of the current system, most laboratory sessions will involve physiological experiments to provide students with greater insight into the physiology of the current system. A close correlation between lecture and laboratory topics will be maintained.

*Co-requisite: BIOL-202L*

*Prerequisites: BIOL-201 and BIOL-201L*

**BIOL-202L (Formerly S219) 0-2-1**  
**Human Anatomy and Physiology II Laboratory**

The A&P laboratory sessions will provide students with hands-on learning opportunities to help conceptualize content discussed in lecture. During lab, students will work on problem sets, examine and dissect organs and/or anatomical models, use microscopes, perform basic physiological experiments and examine cadaver specimens. While some lab sessions will focus mainly on the anatomy of the current system, most laboratory sessions will involve physiological experiments to provide students with greater insight into the physiology of the current system.

*Co-requisite: BIOL-202.*

*Prerequisites: BIOL-201 and BIOL 201L*

**BIOL-204 (Formerly S213) 3-0-3**  
**Cell Biology**

This course focuses on both structure and function of cellular components. Cellular structure is investigated from the molecular level to macromolecular assemblies and organelles with the major emphasis on how these structures function to form a dynamic cell interacting with its environment. Cell

growth, reproduction and communication are discussed. Cells studies include single cells to those organized into tissues in multicellular organisms.

*Co-requisite: BIOL-204L*

*Prerequisites: CHEM-201 and CHEM-201L, grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-204L (Formerly S213) 0-3-1**  
**Cell Biology Laboratory**

The purpose of this laboratory is to introduce the student to some of the procedures and techniques used to investigate cell structure and function, including use of the microscope, differential cell fractionation and biochemical exercises.

*Co-requisite: BIOL-204*

*Prerequisite: CHEM-201 and CHEM 201L, grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-205 (Formerly S217) 3-0-3**  
**Plant Biology**

*(writing intensive)*

Students will study the diversity and evolution of plants, their structure, selected physiological processes and current topics in plant biology.

*Co-requisite: BIOL-205L*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-205L (Formerly S217) 0-3-1**  
**Plant Biology Laboratory**

*(writing intensive)*

This laboratory course includes the examination of algae to flowering plants, and cells, tissues and organs to whole plants. Plant species will be propagated by cloning and spore culture.

*Co-requisite: BIOL-205*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-207 (Formerly S227) 3-0-3**  
**Principles of Genetics**

This course will consider Mendelian genetics and the contributions of other early research on our present knowledge. Included will be crossover consequences, gene mapping, sex linkage, statistical genetics, mutation, chromosome abnormalities and human genetics.

*Co-requisite: BIOL-207 L, Prerequisite: grade of "C-" or better in BIOL-104 and BIOL-104L*

**BIOL-207L (Formerly S227) 0-3-1**  
**Principles of Genetics Laboratory**

This is the laboratory course that must be taken to complete the genetics requirement. The laboratory exercises use current techniques of DNA technology as applied to disease diagnosis, forensic determinations and the isolation and structural examination of the DNA molecule.

*Co-requisite: BIOL-207, Prerequisites: grade of "C-" or better in BIOL-104 and BIOL-104L*

**BIOL-209 (Formerly S235) 3-0-3**



## **Medicinal Plants**

*(writing intensive)*

This course focuses on the use of plants and plant products in human health. Topics include a survey of plants and plant families with medicinal properties, their cultivation and conservation, physiological effects of plant extracts, plant-derived drugs, historical and cultural aspects of medicinal plant use.

*Prerequisite: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

### **BIOL-221 (Formerly S221) 3-0-3** **Microbiology**

*(Writing Intensive)*

This course provides an introduction to environmental, industrial, food and medical microbiology. An understanding of the methods by which microbes produce disease, as well as interact with body surfaces to maintain human health, is also discussed.

*Co-requisite: BIOL-221L*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

### **BIOL-221L (Formerly S221) 0-3-1** **Microbiology Laboratory**

Laboratories are designed to complement and expand information from lectures. Students will gain experience in classical techniques used by environmental and clinical microbiologists for determining unknown bacteria and molds. Practical studies will also compare historical and current methods for physical and chemical removal of microbes.

*Co-requisites: BIOL-221*

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

### **BIOL-302 3-0-3** **Medical Genetics**

This course in medical genetics deals with the definition of the role of genetic variation and mutation in a predisposition to disease, modifying the course of disease or causing the disease itself. It will cover single gene defects caused by a critical error in the information carried by a single gene, diseases due to an excess or deficiency of the genes contained in whole chromosomes or segments of chromosomes, and multifactorial inheritance diseases which result of more than one genes which can act together to produce or predispose to a serious defect. The course will also introduce methods of collecting and interpreting a family history as an integral tool in medical genetics, and integrate this in all aspects of the presentation.

*Prerequisites: BIOL-207 and BIOL-207L*

### **BIOL-303 (Formerly S236) 3-3-4** **Histology**

Histology provides students with an integrated perspective of how adaptations in physiology, biochemistry and morphology allow cellular organization into human organs and support systems. Laboratory studies will introduce students to abnormal embryology, which is the core of many aspects of disease, especially those affecting children. Along with analysis of prepared slides, students will learn to interpret and present abnormal histology/embryology in the form of "case histories."

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L and junior status*

**BIOL-307**

**Developmental Genetics**

**3-0-3**

This course is an elective for students who have completed BIOL 104/104L and required for those in the genetics minor. It will consider animal embryology from gametogenesis (of sperm and egg) to organogenesis (development of organs) and specification with emphasis placed on the genes controlling these processes. The course includes cytogenesis (development of cells) and morphogenesis (genes which control change in body form) of the developing embryo.

*Prerequisite: grade of C-(1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-315 (Formerly S228)**

**3-0-3**

**Immunology** (writing intensive)

The objective of this course is to introduce students to the innate mechanisms by which the human body prevents infection, as well as those involved in specifically acquired immunity. Topics include the structural, functional and genetic aspects of a fully competent immune system that can successfully prevent attack by millions of microorganisms each day. Exploration of the many medical conditions which result from hyperactive- or impaired-immune responses, including allergy, autoimmunity, cancer and AIDS, are studied.

*Prerequisites: BIOL-221 and BIOL-221L*

**BIOL-371 (Formerly S220)**

**3-0-3 or 3-3-4**

**Selected Topics in Biology**

This course provides an opportunity to explore topics in biology not developed in other courses. Examples include specialized areas of organismal biology, conservation biology, developmental and molecular biology. Students may take this course more than once as the topics differ each time it is offered.

*Prerequisite: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L or permission of instructor*

**BIOL-391 (Formerly S231) 0-9-3**  
**Research in Biology I**

Independent research is taken under the guidance of a faculty member. The research will include a written proposal prior to initiation of the project, a literature search, experimental work, a written abstract and report upon completion of the semester and an oral presentation of the work. Guidelines for approval and for final evaluation are available in the College of Science, Health and the Liberal Arts office.

*Prerequisite: permission of the academic associate dean of undergraduate programs in the College of Science, Health and the Liberal Arts.*

**BIOL-392 (Formerly S232) 0-9-3**  
**Research in Biology II**

Continuation of BIOL-391.

*Prerequisites: BIOL-391, permission of the academic associate dean of undergraduate programs in the College of Science, Health and the Liberal Arts.*

**BIOL-401 (Formerly S214) 3-3-4**  
**Molecular Biology**

The first segment of this course deals with molecular genetics with emphasis on in-class experiments. This is followed by a detailed treatment of the molecular basis of genetics, involving the structure and functions of the DNA molecule, chromosome maps, etc. The course concludes with a seminar-type discussion of disease states that have been shown to be genetically linked.

*Prerequisite: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-402 3-0-3**  
**Genetics Seminar**

*(writing intensive)*

This writing intensive course will expose the student to the fields of population genetics and several emerging and important subdisciplines (behavioral, conservation and evolutionary genetics). Human health will be a recurring theme. The seminar format will encourage an independent learning experience. Papers and presentations will build research, communication and critical thinking skills.

*Prerequisites BIOL 207 and BIOL 207L, WRTG 2XX*

**BIOL-407 (Formerly S229) 3-3-4**  
**Comparative Vertebrate Anatomy**

A comparative study of the structure, function and evolutionary relationships of the major vertebrate groups.

*Prerequisite: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**BIOL-409 (Formerly S230) 3-3-4**  
**Cellular Analysis**

This course will teach fundamental methods of contemporary cellular and biotechnology. Laboratory exercises focus on microscopic, biochemical and molecular analysis of cells and cell structures.

*Prerequisites: BIOL-204 and BIOL-204L*

**BIOL-411 (Formerly S298) 3-0-3**

**Life Science Seminar**

*(writing intensive)*

The course covers recent advances in the biological and medical sciences by way of formal presentations and discussions involving both students and invited faculty. In addition, students will learn techniques for the preparation of a research project involving a literature search. Students will be required to carry out a research project and present a formal seminar on this work to their peers.

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 AND BIOL-104L and senior status*

**BIOL-413 3-3-4**

**Pathology**

Pathology represents an integrated perspective of how disease results from a series of common, underlying changes resulting from initial and continued cell stresses. Students will relate disease processes to the symptoms and signs reported by patients and interpreted by physicians through the use of case history presentation and will acquire a variety of light microscopy techniques routinely used in hospitals for the diagnosis and monitoring of abnormal pathology.

*Prerequisites: BIOL-202 and/or BIOL-303*

**BIOL-493, BIOL-494 (Formerly S290, S291) 0-0-3, 0-0-3**

**Preceptorship I and II**

The preceptorship experience is designed to enhance the student's knowledge, technical skills and problem-solving abilities within the biomedical science realm. These studies will be performed off campus under the supervision of biomedical professionals and other practitioners in the medical sciences, previously approved by the program director. Designed to be taken as summer classes between the sophomore and junior years. A minimum of 54-hours required, preferably as six, one-week periods of nine hours per week.

**BLAW-301 (Formerly B421) 3-0-3**

**Business Law I**

Lecture, class discussion and case problems emphasizing legal principles on the following topics: the legal environment, government regulation of business, contracts, personal property, environmental liability as it relates to business transactions, bankruptcy, employment and human resources, and current legal issues. The legal environment as it impacts business decision making is addressed.

**BLAW-302 (Formerly B422) 3-0-3**

**Business Law II**

Lecture, class discussion and case problems emphasizing legal principles on the following topics: agency, corporations, partnerships and joint ventures, commercial paper and real property, limited liability companies, international legal environment and current legal issues.

*Prerequisite: BLAW-301*

**BUS-101 (Formerly B301) 3-0-3**

**Survey of Business (non-business majors)**

This course is designed to provide the non-business major with a basic foundation in a broad range of business subjects including economics, organizations and human resources, accounting, finance, marketing, business law, ethics, cultural diversity and strategic management. It may be taken by

non-business majors as a free elective or as the first course in the sequence for the business minor. This course may not be used by business majors to satisfy any curriculum requirement.

**BUS-317 Opportunity Finding in Emerging Markets 3-0-3**

Students learn how to describe, visualize, develop and assess a business model by utilizing design thinking and qualitative research methods within a cultural immersion context and through a combination of classroom seminars and experiential instructions. Central to this learning process is identifying value propositions for a range of fields in the private sector and non-profit sectors. While abroad, students will have daily seminars from area experts and site visits to organizations representing diverse industry sectors.

*Prerequisite: Students who have completed 60 credits or more.*

**CAD-201 (Formerly T122) 2-2-3**

**Introduction to Digital Imaging**

This course focuses on increasing the student's individual level of computer literacy through the exploration of the basic structure of the operating system, general internet skills and the fundamentals of both raster and vector based software. Course projects provide hands-on experience with Adobe Photoshop and Adobe Illustrator software.

**CAD-204 (Formerly T126) 2-2-3**

**CAD for Fashion Design**

Computer-aided design is utilized in every segment of the fashion industry from concept development, fabric design and illustration to line development, technical drawing, and presentations. Students learn CAD software and gain skills utilized in a variety of industry-related projects.

*Prerequisite: FASHDES-252 , FASHDRW-207*

**CAD-206 (Formerly I342) 1-4-3**

**CAD I for Industrial Design**

The course introduces students to computer-aided design with a focus on the industrial design processes. In an intuitive fashion, students create and refine designs using a solids-modeling software package. In order to recognize the critical role CAD plays in the development of designs, students will use designs created in design studio courses as the subject matter of the CAD activities. Design-control drawings, three-dimensional rendered drawings and perspective drawings will be the course's output.

**CAD-301 (Formerly T123) 1-5-3**

**Advanced Digital Imaging for Textile Design**

This course focuses on both the conceptual and technical aspects of digital portfolio presentation for the textile designer. Course projects provide an in-depth exploration of Adobe Photoshop, Adobe Illustrator, InDesign and Dreamweaver software.

*Prerequisites: CAD-201*

**CAD-306 (Formerly I621) 1-4-3**

**CAD II: Digital Design Techniques**

This course will build upon principles introduced in introductory CAD courses. It is primarily a laboratory course in which students will learn to take their early design concepts through to the final presentation using advanced digital design techniques. Students will use multiple digital design software packages

across computer platforms with an emphasis on CAD packages such as NURBS modelers and animation software, as well as vector-based, desktop-publishing programs and bitmap-based programs.

*Prerequisite: grade of "C" or better in CAD-206 or permission of the instructor*

**CAD-401 (Formerly T125) 2-2-3**  
**Apparel CAD/CAM**

A comprehensive course that incorporates software widely used in the apparel industry where patterns are created then graded and made into markers. Industry standards and specifications are followed for each area. Students use software to solve problems and increase productivity.

*Prerequisite: FASHDES-213*

**CHEM-101 (Formerly L312) 3-2-3**  
**General Chemistry**

*(for non-science majors)*

This course allows students to pursue further study of chemical issues as they relate to the consumer and to health. Students will become familiar with issues surrounding the use of everyday products such as laundry products, personal-care products, plastics, fibers and food additives. Also included are an introduction to organic chemistry, biochemistry and the chemistry of some health-related issues. Students should complete this course with an awareness of the complexities of the chemical structures in their daily lives and the issues involving their use and abuse, so that they may make more informed decisions.

**CHEM-103 (Formerly L321) 4-0-3**  
**Chemistry I**

*(required for Science and Engineering majors)*

An introduction to the fundamental laws and theories of chemistry, including the properties of matter, chemical reactions and stoichiometry, energy and thermochemistry, atomic structure and the periodic table. Basic knowledge of algebra, geometry and trigonometry is presumed. Students enrolled in MATH-099 may not take this course. This course is not recommended for students enrolled in WRTG-099 or READ-099 fundamentals courses.

*Co-requisite: CHEM-103L*

**CHEM-103L (Formerly L321) 0-3-1**  
**Chemistry I Laboratory**

*(required for Science and Engineering majors)*

This hands-on laboratory-based course highlights concepts covered in Chemistry I Lecture. Emphasis is placed on developing good laboratory and data analysis skills. Experiments include acid/base titrations, heat determination using calorimeters and oxidation/reduction reactions.

*Co-requisite: CHEM-103*

**CHEM-104 (Formerly C112) 4-0-3**  
**Chemistry II**

*(required for science majors)*

This course is a continuation of CHEM 103 Chemistry I that provides an introduction to chemical bonding and molecular geometry, property of gases, intermolecular attractions, solutions, kinetics, chemical equilibrium, acids, bases and thermodynamics.

*Co-requisite: CHEM-104L*

*Prerequisites: CHEM-103 and CHEM-103L*

**CHEM-104L (Formerly C112) 0-3-1**  
**Chemistry II Laboratory**

*(required for science majors)*

This hands-on laboratory-based course highlights concepts covered in Chemistry II lectures. Analytical and data interpretation/presentation skills are honed through a series of experiments including aspirin synthesis and determination of vitamin C content.

*Co-requisite: CHEM-104L*

*Prerequisites: CHEM-103 and CHEM-103L*

**CHEM-201 3-0-3**  
**(Formerly C121)**  
**Organic Chemistry I**

First semester in a 2-semester lecture series on Organic Chemistry. Topics include origin and history of organic chemistry; chemical bonding, structure and properties of organic compounds; structure, properties and nomenclature of the alkanes; stereochemistry, and a comprehensive discussion of the substitution and elimination reactions of alkyl halides.

*Co-requisites: CHEM-202L*

*Prerequisite: CHEM-104 and CHEM 104L*

**CHEM-201L 0-4-1**  
**(Formerly C121L)**  
**Organic Chemistry I Laboratory**

First semester in a 2-semester companion course to Organic Chemistry Lecture. Topics include practical instruction in basic organic chemistry laboratory techniques such as recrystallization, distillation, extraction, reflux, thin-layer chromatography, gas chromatography, and IR spectroscopy. Utilizing these techniques, the synthesis and characteristic reactions of alkyl halides are explored.

*Co-requisites: CHEM-201*

*Prerequisites: CHEM-104 and CHEM-104L*

**CHEM-202 3-0-3**  
**(Formerly C122)**  
**Organic Chemistry II**

Second semester in a 2-semester lecture series on Organic Chemistry. Topics include the structure, nomenclature, synthesis and characteristic reactions of alkenes, alkynes, alcohols, aldehydes, ketones & aromatic compounds.

*Co-requisite: CHEM-202L*

*Prerequisite: CHEM 201 and 201L*

**CHEM-202L** **0-4-1**

**(Formerly C122L)**

**Organic Chemistry II Laboratory**

Second semester in a 2-semester companion course to Organic Chemistry Lecture. Utilizing techniques learned in first semester, the synthesis and characteristic reactions of alkenes, alcohols, aromatics and aldehydes/ketones are studied.

**CHEM-206** **3-3-4**

**Forensic Chemistry**

Students will become acquainted with the various sub-disciplines of forensic science with emphasis on the chemical principles used to collect, process, identify, quantify and qualify crime scene/victim evidence. Through lectures and case studies, the scientific foundations for the examination of physical, chemical and biological evidence will be explored. Laboratory sessions will provide hands on experience with modern forensic techniques used to analyze physical evidence such as blood, glass and fibers. The course will culminate with a mock trial in which students present the results of their analytical investigations to a jury.

*Prerequisites: CHEM-104, CHEM-104L, BIO-104, BIO-104L*

**CHEM-214 (Formerly C123)** **3-0-3**

**Bioorganic Chemistry**

This course is a one-semester overview of organic chemistry and biochemistry for PA majors and open to those who meet the prerequisites. After introduction to different functional groups, the course provides a systematic study of the biologically important compounds, including amino acids, proteins, nucleic acids, enzymes, carbohydrates and lipids. Emphasis will be placed upon the structure, properties and functions of these compounds. The course will culminate in an overarching discussion of the intricacies of metabolism of some of these biomolecules.

*Prerequisites: CHEM-104 and CHEM 104L, grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**CHEM-305 (Formerly C131)** **3-4-4**

**Physical Chemistry I**

Fundamental topics in thermodynamics are covered, emphasizing the first three laws of thermodynamics. Applications of these principles and chemical equilibrium to ideal gases, real gases, solutions and solids are discussed. Chemical kinetics is covered in detail. A brief examination of the field of chemical dynamics is included. Where appropriate, current research in these areas will be discussed. The laboratory will emphasize using chemistry techniques such as FTIR, UV-Vis, GC and computational programs to examine fundamental physical processes.

*Prerequisites: CHEM-202 and CHEM 202L, PHYS-203 and PHYS-203L, and pre or Co-requisite MATH-213*

**CHEM-306 (Formerly C132)** **3-4-4**

**Physical Chemistry II**



Quantum mechanics is the fundamental theory underlying the description of atoms. It details how atoms can interact on the microscopic level. Quantum mechanics will be used to understand the observed spectroscopic properties of atoms and molecules. Statistical mechanics, which connects the macroscopic world of thermodynamics and kinetics with quantum mechanics, will also be covered. The laboratory is a continuation of CHEM-305 with an emphasis on spectroscopy.

*Prerequisite: CHEM-305*

**CHEM-309 (Formerly C142) 3-3-4**  
**Inorganic Chemistry**

An advanced course in modern inorganic chemistry that covers structure and bonding, symmetry, thermodynamics and mechanisms, along with a systematic discussion of reactions and properties of representative main group and transition metal elements. This course will also illustrate some of the relationships between inorganic chemistry and other areas of chemistry, including biochemistry. The laboratory covers a variety of synthetic techniques and physical and analytical methodologies that are particularly applicable to inorganic compounds.

*Prerequisite: CHEM-306*

**CHEM-323 (Formerly C193) 3-3-4**  
**Instrumental Methods of Analysis**

*(writing intensive)*

This course provides an overview of the variety of analytical and instrumental methods for quantitative and qualitative chemical analysis. Topics include gravimetric and volumetric analysis; ultraviolet, infrared and visible spectroscopy; gas and liquid chromatography; and mass spectrometry. Laboratory sessions hone students' analytical- and critical- thinking skills. Students are required to work on a group research project and present their findings at a local/regional scientific conference.

*Prerequisite: CHEM-202 and CHEM 202L*

**CHEM-371 (Formerly C199) 3-0-3**  
**Selected Topics in Chemistry**

A study of a specialized topic and/or recent developments in one of the fields of chemistry. Sample topics might include theoretical organic chemistry, spectroscopy, photochemistry, stereo-chemistry and computational chemistry.

*Prerequisite: CHEM-202 and CHEM 202L*

**CHEM-391 (Formerly C231) 0-9-3**  
**Research I in Chemistry**

Students interested in pursuing independent research in any field of chemistry or biochemistry under faculty supervision must submit a proposal to the academic associate dean of undergraduate programs in the College of Science, Health and the Liberal Arts for approval at least two weeks before pre-registration. The research will include both literature search and experimental work in any current field of chemistry or biochemistry. At the end of the semester, students will be expected to do an oral presentation to the faculty during reading days and prepare a comprehensive written report as mandated by the American Chemical Society.

*Prerequisite: permission of academic associate dean for undergraduate programs in the College of Science, Health and the Liberal Arts.*

**CHEM-392 (Formerly C232) 0-9-3**

## Research II in Chemistry

Continuation of CHEM-391

### **CHEM-405 (Formerly C171) 3-0-3**

#### **Advanced Organic Chemistry**

*(writing intensive)*

An in-depth study of the factors that affect organic reactions such as solvent, energy, kinetic and steric factors. These are used to examine a variety of reaction mechanisms such as nucleophilic substitution, elimination, aromatic substitution and rearrangement reactions.

*Prerequisite: CHEM-202 and CHEM 202L*

### **CHEM-410 (Formerly C172) 3-0-3**

#### **Polymer Chemistry**

Physical and chemical study of natural and synthetic polymers based on the mechanism of polymer formation, including such topics as stereochemistry, cationic, anionic and free radical polymerization reactions and the formation of stereospecific polymers by use of heterogeneous catalysts.

*Prerequisite: CHEM-405*

### **CHEM-417 (Formerly S431) 3-3-4**

#### **Environmental Chemistry**

Environmental Chemistry will allow students to develop a general understanding of the role of chemistry and physiochemical concepts in the development, identification and solution of environmental problems. This course will provide the necessary background for conducting chemical analyses on water, air and soil samples. The skills learned in this course will be employed in learning more about the application of chemical principles in solving environmental problems.

*Prerequisite: CHEM-104 and CHEM 104L*

### **CHEM-418 (Formerly S443) 3-3-4**

#### **Advanced Aquatic and Atmospheric Chemistry**

This course will allow students to become familiar with the chemistry of environmental issues confronting humankind. This course will not only expand on CHEM-417, but will emphasize real-world applications. These applications will be handled with the use of thermodynamics, kinetics, acid-base equilibria, redox reactions, complex formation and surface complexation, to name a few. The investigative and problem-solving techniques and the analytical skills learned in this class will be employed throughout the student's lifetime and are presently demanded by industrial, research and remediation firms.

*Prerequisites: CHEM-202 and CHEM 202L, CHEM-417*

### **CHINE-101 3-0-3**

#### **Chinese I**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**CHINE-201                      3-0-3**

**Chinese II**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**CMGT-101** **2-2-3**  
**Construction Graphics**

The course is an introduction to the nature and vocabulary of graphical expression used in construction drawings, details and sketches in the architectural, structural, civil, mechanical and electrical engineering disciplines. Students develop an appreciation for the importance of effective graphical documentation and interpret drawings in terms of form, size, distance, quantity and interrelation of elements. Emphasis is placed on effective sketched, verbal and written expression of drawing interpretations to audiences not familiar with construction drawings.

*Prerequisites: None, Students not majoring in Construction Management must have permission from the Program Director.*

**CMGT-102 (Formerly ARCH-427)** **3-0-3**  
**Introduction to the Construction Industry**

Through analysis of the relevant case studies, this course examines construction management concepts and principles as applied to contemporary practice and investigates the intersecting roles of construction manager, architect, client and general contractor. Topics include planning, programming and documentation from pre-construction to project close-out; legal aspects relative to environmental protection, public and worker safety, contract documents, insurance and bonds; labor relations and inspection; project control, total quality management and ethics in construction management.

*Prerequisites: None.*

**CMGT-104 (Formerly ARCH-428)** **3-0-3**  
**Introduction to the Construction Management**

Utilizing pertinent case studies, this course focuses upon the planning and scheduling stages of the building process, with particular emphasis upon reading construction documents and basic estimating principles applied to small-scale, residential and commercial projects. Construction site procedures, as well as techniques for estimating unit quantities and costs of materials, labor and equipment, are introduced and given industry application utilizing building specifications and computer software.

*Prerequisites: CMGT-102 (Formerly ARCH-427)*

**CMGT-200** **2-2-3**  
**Construction Project Planning and Scheduling**

This course provides a study and application of the tools and concepts used in planning and controlling construction projects. Students employ the Critical Path Method (CPM) of project scheduling, resource leveling and time-cost analysis using manual and computer-based solution methods to develop and maintain working project schedule models.

*Prerequisites: CMGT 104 (Formerly ARCH 428) Introduction to Construction Project Management and CMGT 101 Construction Graphics or, permission of the Program Director.*

**CMGT-202** **2-2-3**  
**Construction Cost Estimating and Budgeting**

This experiential course familiarizes students with manual and computer aided techniques of contract document quantity surveys, estimated cost calculations and the development and maintenance of purchase and management budgets.

*Prerequisites: CMGT-104 (Formerly ARCH-428) and CMGT-101 or permission of the Program Director*

**CMGT-204** **3-0-3**

**Behavior of Materials**

This course familiarizes students with the mechanical behavior of materials and systems in equilibrium using Newton's laws of motion. Students will examine the principles of force equilibrium, construct free-body diagrams, and model the effect on various structural shapes and materials under load.

*Prerequisite: MATH-103 or MATH-111 and PHYS-101*

**CMGT- 300**

**Construction Accounting and Cost Control 3-0-3**

This course familiarizes students with construction cost accounting systems and reporting formats. Students will examine the sources of cost data and report generation and will evaluate performance based on analysis of data for labor, material, equipment, and subcontract cost. Emphasis is placed on the formulation of management decisions and the ongoing evaluation of their effectiveness.

*Prerequisite: CMGT 202, ACCT 101*

**CMGT-302** **3-0-3**

**Construction Contract Administration**

This course familiarizes students with the various forms of contract used in the construction industry and best practices for their administration and management. Through exploration of cases and current events, students will explore contract operation regarding rights, duties, responsibilities, claims management and assignment of risk. Emphasis is placed on the management of contracts as a means for the achievement of overall project success.

*Prerequisite: CMGT 102.*

**COLLST-499 (Formerly L911)** **4-0-4**

**COLLST-499 (Formerly L911)**  
**Contemporary Perspectives**

*(writing intensive)*

The capstone seminar of the College Studies program, this writing intensive-course examines the origins and impact of current international trends with an emphasis on the period since World War II. Students also address questions of intercultural understanding at the global, regional and local level. A final research paper requires students to connect these global trends with issues in their profession.

*Prerequisites: Humanities I, one course from AREAST-2XX or Foreign Languages and one Junior Seminar. May not be taken CR/NC.*

**COMM-100** **3-0-3**  
**Introduction to Professional Communication**

Students in this course learn methods, technologies and vocabulary relevant to the field of professional communication. Students apply that learning as they practice multiple types of writing and other means of communication integral to contemporary professional communication. Using perspectives of both theory and practice, students also discuss complex issues that arise from professional communication in various technologies and across cultural contexts. Required for Professional Communication majors. Prerequisites: None

**COMM-105** **3-0-3**  
**Design as Communication**

Students learn to apply basic principles and elements of design as they relate to communication. Through a study of found examples of visual design and by applying design concepts to their own work, students learn to explain how hierarchy of information, sequence of delivery and juxtaposition of type and image all build toward audience trust and understanding of the visual experience. In addition, students will explore wider implications of considering design as communication.

*(Not available to majors from the School of Design and Engineering or the College of Architecture and the Built Environment)*

**COMM-200** **3-0-3**  
**Reading the Visual**

*(writing intensive)*

Students will analyze various visual genres such as comics, graphic novels, movies, advertisements and political cartoons to learn how the visual elements of texts affect understanding. Students will examine the considerations required for communicating in visual media and will produce a multimedia project and a final researched project.

**Prerequisite: WRTG-101**

**COMM-202** **3-0-3**  
**Survey of Research Methods**

*(writing intensive)*

Students in this course analyze and design survey instruments, polls, samples and other quantitative and qualitative research methods. Students learn about the ethics of research, especially regarding human subjects. The course includes introduction to electronic resources, print resources, archiving data, mining data, information architecture, database management and ethnography in business and design.

*Prerequisite: WRTG-101*

**COMM-204** **3-0-3**  
**Technologies of Communication**

The social media course that's an essential component of the major. Students will consider communication technologies and how and what people communicate using those technologies. We'll examine the role of communication technologies in society and culture, with an emphasis on how they function in the information age. This will include both the social and cultural influences that have shaped the development of various emerging media, information, and communication technologies.

*Prerequisite: WRTG-101*

**COMM-303** **3-0-3**  
**Technical Writing**

*(writing intensive)*

Students will learn to write and design documents in a variety of technical genres, including executive summaries, reports, instructions, among others, for technical and professional audiences. The course will usually take place in a discussion or workshop format and will use case studies based on real-world situations. Because technical writing in the workplace is often collaborative, students will often work in teams during class and on the final project.

*Prerequisite: COMM-100*

**COMM-305** **3-0-3**  
**Multimedia Presentation**

Students in this course learn to marry the basics of effective public speaking with visual technology, to allow them to make effective and professional quality presentations. Students will master these technologies and intensively practice speaking in front of an audience. In addition, students will study the standards of professional presentation that benefit different audiences.

*Prerequisite: WRTG-101*

**COMM-307** **3-0-3**  
**Public Relations and Media Writing**

*(writing intensive)*

Students in this course learn the fundamentals of writing for multiple public audiences in multiple communication formats and genres. Areas addressed include public relations, public affairs, media relations and press releases. Students will also learn to judge the importance of information as well as set priorities and tailor writing to meet the needs of different audiences.

*Prerequisites: COMM-100*

**COMM-400** **3-0-3**  
**Usability Testing**

*(writing intensive)*

Usability testing is a technique used to measure a document or website's capacity to meet its intended purpose. The process of usability testing gives direct input on how the anticipated audience will use the product and is critical to product development. This course provides an overview of usability tools and techniques, and then focuses on usability testing. Through discussion, reading and practice, students learn the concepts and techniques needed to conduct a usability test.

*Prerequisite: COMM-202 and COMM-303*

**COMM-402** **3-0-3**  
**Professional Ethics in Communication**

*(writing intensive)*

This course, designed for the senior in professional communication, will focus on important ethical issues facing the profession and its practitioners. The course will not advocate for particular ethical standards, but it will strive to motivate students to critically and analytically think about standards that are germane to their personal and professional lives, to consider reasons why current standards are in place and to evaluate whether current ethical standards are sufficient, workable and understood by communication professionals.

*Prerequisites: COMM-202 and COMM-307*

**COMM-404** **3-0-3**  
**Professional Communication Capstone Portfolio Project**

*(writing intensive)*

This course, designed for the senior in professional communication, will focus on integrating his/her college course work through developing a capstone portfolio. By working on a capstone portfolio that draws on prior course work and that culminates in an oral presentation and a written project, students will use their critical thinking skills in synthesizing previous course work to extend and develop their original ideas.

*Prerequisites: COMM-307 and COMM-400*

**DECFRM-200** **3-0-3**  
**Business Models**

Business Models, 3-0-3. Students in this course apply and extend skills from DEC101, including design thinking, teamwork, and project management within the framework of a customer-centric approach to organizations and business models. The course explores business model innovation, execution, and strategy to examine industries and organizations, and applies these concepts in financial, social, political, and environmental contexts. As a culminating assignment, student teams build and defend their own unique business models.

*Pre-requisite: DEC101.*

**DECPROC-101 (also listed as ARTS-101)** **2-2-3**  
**Integrative Design Process**

Design thinking is a shared process and key component of innovation for all fields within the College of Design, Engineering and Commerce. In this course, students will develop and refine abilities to construct, analyze and use the process of designing within an interdisciplinary, team based environment. Integrative Design Process is a part of the DEC core and is a mandatory course for all students in the College of Design, Engineering and Commerce. This course also fulfills the Arts and Cultures requirement of the College Studies Program for students enrolled in the majors in the School of Business Administration or for students enrolled in majors in the College of Science, Health and the Liberal Arts.

**DECSYS-202 (also listed as SCI-202)** **3-0-3**  
**Materials Selection**

The materials available to meet design requirements for a specific application often limit performance in disciplines ranging from engineering and architecture, through industrial design, to fashion design and textiles. In fact, material selection is often the limiting performance factor in designing new products



and processes. This course explores the governing principles of materials science, with a specific emphasis on using the scientific method to develop a “system approach” to materials selection at various stages of the design process. *(This course can be used to satisfy a general Education Science requirement.)*

**DECSYS-206 (also listed as SCI-106) 3-0-3**  
**Biology for Design: From Biological Adaptation to Biomimetic Design**

The goal of this course is to increase the sophistication of design, engineering, business and other students regarding how design manifests itself in nature as biological adaptation, and to use that knowledge as a launching pad for thinking about biomimetic design. Biomimicry is a hot topic in architecture and design. Work in this field is usually done by designers working in collaboration with biologists who are highly specialized in a particular area, often plant or animal physiology. However, there are certain conceptual underpinnings pertaining to design and adaptation in nature that designers are often lacking that will prepare them for further exploration of this field. The course consists of two major units, the first focusing on the biology of adaptation from an evolutionary and ecological perspective. The second section consists of a survey of biomimetic design and how biomimicry has been employed to solve a range of design problems in architecture, materials science, systems design and technology.

*Prerequisites: None*

**DECSYS-208 (also listed as SCI-108) 2-3-3**  
**Sustainability & Eco-Innovations**

The emerging fields of sustainability and environmental sciences will be surveyed to highlight how entrepreneurs are capitalizing on rapid environmental transformation. The rate, scale and degree of global environmental change, key scientific feedback loops the regional differences in terms of impacts and opportunities will be analyzed. Case studies of eco-innovation strategies employed by businesses and designers will be explored so that students can create their own scientific monitoring and evaluation plan for implementing a simple eco-innovation.

*Prerequisites: None*

**DIGD-206 (Formerly D323) 1-5-3**  
**Foundations in Web Design and Strategy**

This course will be an exploration into the design process and techniques for creating interactive experiences. This will be first step in learning to think and work as a web designer. We will cover a basic understanding of information architecture, usability, front end programming logic and design literacy. We will also discuss the principles of raster and vector electronic imaging as a means to provide a solid foundation needed to succeed in the interactive design field.

*Prerequisite: ADFND-102 or DSGNFND-203 or GRAPH-202 or permission of the Director of the Interactive Design & Media or Graphic Design Communication program.*

**DIGD-301 (Formerly D511) 0-10-5**  
**Interactive Design I**

This studio explores the principles and strategies involved in designing and producing effective interactive publications. Issues of navigation, digital ergonomics, information architecture, way finding,

semiotics, symbolism and electronic publishing will be explored through a series of increasingly difficult and technologically demanding exercises leading toward a longer and more in-depth final project.

*Prerequisites: GRAPH-202 or ARCH-202 and admission to the Interactive Design and Media program or permission of the Interactive Design and Media program director*

**DIGD-302 (Formerly D512) 0-10-5**  
**Interactive Design II**

This studio introduces students to a variety of media used in interactive design including motion topography for the screen, kinetic type, graphic motion and online video development. Students will be introduced to the basic concepts and strategies needed to integrate this with interactivity. Issues of navigation, information architecture and electronic publishing will be covered. This studio course will include a series of progressively more difficult and technically complex projects leading toward a longer and more in-depth final project.

*Prerequisite: DIGD-301*

**DIGD-305 (Formerly D704) 3-0-3**  
**Theory of Electronic Communication Seminar I**

*(writing intensive)*

This seminar course provides students with a theoretical understanding of the role of the digital designer within the constantly evolving electronic marketplace. Issues of e-commerce, digital communication, electronic ethics and professional practice will be discussed. Special focus will be placed on how our existing culture has been, and is currently being, revolutionized by the information explosion.

*Prerequisite: Admission into Interactive Design and Media program*

**DIGD-307 (Formerly D625) 1-5-3**  
**Advanced Web Design and Strategy**

This course exposes students to conceptual and technical aspects of Web design. Information architecture, semiotics, storyboarding and site management are taught; in addition to learning technical skills in Web production software and HTML. Additional areas of focus include typography, color theory, composition and motion graphics for the Web. The final project requires the publication of a Web site that pushes the boundaries of traditional interactive media.

*Prerequisite: DIGD-206 or GRAPH 310 or ANIM-202*

**DIGD-312 (Formerly D628) 1-5-3**  
**Multimedia Design**

This course exposes students to the conceptual and technical aspects of designing and creating interactive multimedia experiences. In addition to learning technical skills in multimedia authoring software, students will be encouraged to develop innovative forms of electronic content made possible by CD-ROM media. The final project of the students' choosing will demonstrate their ability to create and develop interactive media in a cross-platform environment.

*Prerequisite: DIGD-206 or ANIM-202 or approved equivalent*

**DIGD-401 (Formerly D711) 0-10-5**  
**Interactive Design III**

This studio will explore the translation of three- and four-dimensional concepts of space into two-dimensional screen images, interactivity and animation. Students will be introduced to the theory and practices used in integrating 3D modeling/rendering, motion graphic production and web into a rich interactive environment. The mediums of choreography, filmmaking, architecture, performance art and music will be discussed as potential sources of inspiration for creating innovative digital spaces and experiences. A series of increasingly complex projects will culminate in a more demanding final project.

*Prerequisite: DIGD-302*

**DIGD-403 (Formerly D714) 3-0-3**  
**Web Development**

This course will explore the Web markup languages, HTML, CSS and Java Script, required for advanced control of Web design. Students will be introduced to these languages through lectures, demonstrations and practical exercises. The focus will be on writing, testing and de-bugging the code and its appropriate application. A series of increasingly complex exercises will gradually build the student's knowledge and understanding of these languages.

*Prerequisite: DIGD-301 or DIGD-307*

**DIGD-405 (Formerly D629) 1-5-3**  
**Digital Video Design and Production**

This course exposes students to the principles of digital-video design and production. Students will become versed in non-linear, video-editing software as a means to create effective digital-video presentations. A series of projects develop essential skill sets such as storyboarding, video capture, editing and compositing. A final, student-defined project will demonstrate mastery of the conceptual and technical aspects of digital-video design and production.

*Prerequisite: DIGD-206 or ANIM-202 or approved equivalent*

**DIGD-406 (Formerly D715) 3-0-3**  
**Actionscript 3.0**

This course will explore the multimedia scripting languages ActionScript and Lingo, required for advanced control of multimedia. Students will be introduced to these languages through lectures, demonstrations and practical exercises. The focus will be on writing, testing and de-bugging the code and its appropriate application. A series of increasingly complex exercises will gradually build the student's knowledge and understanding of these languages.

*Prerequisite: DIGD-301*

**DIGD-415 (Formerly D630) 1-5-3**  
**3D Modeling**

This course exposes students to the conceptual and technical aspects of three-dimensional modeling and virtual environments. Students will complete a series of specifically designed exercises of increasing difficulty leading to a final project of the student's choosing. The class will cover the basic principles of 3D modeling and animation including polygonal and NURB modeling, texturing, lighting and animation.

*Prerequisite: DIGD-206 or approved equivalent*

**DIGD-498 (Formerly D810) 3-0-3**  
**Interdisciplinary Capstone Project Preparation**

*(writing intensive)*

This course requires students to identify and analyze potential capstone projects through a number of lenses including technical feasibility, marketability and design potential. With faculty guidance, students will form interdisciplinary teams that reflect the specific requirements of the chosen capstone project. To complete this course, a project proposal must be submitted documenting the factors that will allow the development of a successful capstone project. Research and presentation skills are a major focus of this course.

*Prerequisites: DIGD-302*

**DIGD-499 (Formerly D712) 0-10-5**  
**Interactive Design IV Interdisciplinary Capstone Project**

This capstone studio will develop the ability of the interactive designer to successfully participate on an interdisciplinary team. Students from a variety of majors, already organized in the capstone preparation course, will collaborate to develop a final, working prototype of a product, service, experience or publication of their choice that synthesizes their knowledge and skills from the previous semesters. The students will develop a project that demonstrates innovation, marketability and relevance within the larger community.

*Prerequisites: Grade of "C" or better in DIGD-401 and DIGD-498*

**DRAW-101 (Formerly T712) 1-5-3**  
**Drawing I**

Basic drawing experience to develop the understanding of form as applied to two- and three-dimensional space. The student works from nature, still life and the human figure in a variety of media; exploring qualities of line, texture, light and space representation. Students begin to explore subjects and develop ideas with application to the design majors.

**DRAW-201 (Formerly T713) 1-5-3**  
**Drawing II for Graphic Design**

Advanced drawing experiences continue the study of form and structure begun in Drawing I. In addition, students are encouraged to develop individual expression in a variety of graphic media. Drawing as a means of developing graphic ideas is stressed.

*Prerequisite: DRAW-101*

**DRAW-206 (Formerly T714) 1-5-3**  
**Drawing II: Figure Drawing**

In this course, students acquire special knowledge of the human figure and anatomy. A variety of media and methods of graphic representation are explored. Perceptual skills, as well as cognitive aspects of drawing the human form, will be studied. Live models, both clothed and nude, charts, skeleton model and the self will be used as sources for study. Required for Fashion Design majors.

*Prerequisite: DRAW-101*

**DRAW-301 (Formerly I633) 1-5-3**  
**Drawing: Design and Development**

This is an advanced drawing course developed for designers of all disciplines who want to improve the designer's ability to apply knowledge imparted in other courses to the development of designs. Wherever possible the subject matter of the students' design studio courses will be used as the subject matter for drawing exercises.

*Prerequisite: VSDRW-101 and INDD-102*

**DRAW-303** **1-5-3**  
**Advanced Drawing: Materials and Techniques**

Advanced Drawing: Materials and Techniques is designed to further develop the design student's drawing abilities and creative thought process, while encouraging conceptual development and a deeper understanding of contemporary issues in art and design. This course will provide an in-depth exploration of line, color and materials using a variety of drawing tools, while introducing a more conceptual approach to drawing. Students will participate in off-campus trips to galleries and museums.

*Prerequisite: DRAW-101*

**DSGN-371** **(3-0-3) or (1-5-3)**  
**Special Topics in Design**

An upper-level course designed to take advantage of resident/adjunct/visiting faculty members' expertise or a special focus wanted by the School for one or two terms. These courses might provide an in-depth treatment of recent advances in subjects of current interest in a given field whose subject matter is not necessarily needed to be offered long term. A specific "topic" may be delivered a maximum of two terms.

*Prerequisites: Announced prior to registration*

**DSGNFND-103 (Formerly T701)** **1-5-3**  
**Design Foundations I**

This foundation design course explores the basic elements and principles of 2D and 3D form and their application in the design process. Line, shape, mass, space, texture and gray value are introduced as fundamental and interrelated components necessary in structuring solutions to problems in design. Projects are introduced that encourage students to express ideas in a visual/tactile context, while exploring the interaction of ideas and materials.

**DSGNFND-203 (Formerly T702)** **1-5-3**  
**Design Foundations II**

Color is introduced in this foundation design course with an emphasis placed on its practical application in the design process. Projects done by students, using a variety of media, will explore the interaction of color in design with formal, biophysical and psychological implications and goals.

*Prerequisite: DSGNFND-103*

**DSGNFND-303 (Formerly T704)** **1-5-3**  
**Design Foundations III**

In-depth studies emphasizing the use of color and varied media in both 2D and 3D forms are undertaken in this foundation course. The interrelationship of the elements and principles of design are addressed through solving a variety of visual problems. Processes of abstraction are explored in projects using a wide variety of media. Students will be expected to develop their abilities for critical analysis of their own work, as well as design processes and products in general.

*Prerequisite: DSGNFND-203*

**DSGNFND-423 (Formerly T729)** **2-2-3**  
**Design Concepts**

Students are introduced to basic design theory as it relates to apparel design and merchandising including hands-on exercises in color, composition, presentation and critique skills. Trend forecasting and brand analysis provides an overview of the product development process. May not be taken by fashion design majors.

*Prerequisite: FASHMGT-101*

**ECBIO-101 (Formerly S430) 3-0-3**  
**Environmental Issues**

In this course, students will explore the ecological, chemical, social, economic and political implications of critical global environmental issues including water pollution, pesticides, energy, acid rain, global warming, waste management, biodiversity loss and population growth. Alternative solutions proposed to address these experimental issues will be explored from multiple perspectives.

*Prerequisite: Science I (SCI-101, BIOL-101, BIOL-103, CHEM-101, PHYS-101)*

**ECBIO-201 (Formerly S238) 3-0-3**  
**Biodiversity**

The purpose of this course is to explore what is known about the abundance and distribution of all species on earth, what threatens and supports these species and what efforts humans have taken both in the United States and globally to destroy and conserve biodiversity. Genetic variability, demographic and population dynamics, environmental variation, economic value and legal status will be compared for the design of captive breeding programs, protected areas management and sustainable use alternatives.

*Prerequisite: Science II (completion of any two of the following courses: SCI-101, SCI-102, BIOL-101, BIOL-103, CHEM-101, CHEM-103, PHYS-101, PHYS-201)*

**ECBIO-207 (Formerly S461) 2-2-3**  
**Soils**

This course examines factors of soil formation and discusses basic physical, chemical, ecological and morphological soil properties that affect soil characteristics in managed and natural landscapes, as well as how important soil classification variables are influenced by these processes. This is an interactive lecture/laboratory course complemented by local field trips with emphasis on soils from pedon-to-landscape as resources for environmental quality.

*Prerequisites: grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**ECBIO-208 (Formerly S462) 2-3-4**  
**Local Flora**

An introduction to regional native plants used in landscape architecture and ecological restoration. Characteristics, terminology and keys used in identifying plants and plant families will be taught as well as sight recognition of common species. Other topics include plant growth, development and propagation, optimal habitats and recognition of best management practices. Field work at local/regional sites constitutes a significant part of the course.

*Prerequisites: BIOL-101, or grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L*

**ECBIO-301 (Formerly S233) 3-3-4**

## **Ecology**

This course quantitatively measures the relationship between organisms and their environment at the population, community, landscape and global level. Critical ecological controversies will be explored. Field data for both flora and fauna will be collected, analyzed and presented following guidelines from professional scientific journals.

*Prerequisite: grade of C- (1.67) or better in BIOL104 and BIOL 104L or grade of C- (1.67) or better in ECBIO 208*

### **ECBIO-302 (Formerly S234) 3-3-4** **Experimental Field Ecology**

This course focuses on the historical, legal, ethical, economic and scientific foundation of the emerging field of conservation biology. Genetic, ecological and population analytical methods will be applied to case studies of conservation programs from around the world with an emphasis on research design critiques. Experimental design and statistics for field problems will be covered in depth. Students will design, implement, analyze and present their findings from an ecological field experiment.

*Prerequisites: grade of "C" or better in ECBIO-301 and co-requisite STAT-301*

### **ECBIO-303 2-3-4** **Public Health Issues**

Public Health Issues: Are Americans healthy? This upper-level science elective course examines the scientific, psychological and policy dynamics associated with public health. Students will design experiments to measure their own health in a series of hands-on interactive laboratory exercises while comparing their results to national level demographic, epidemiological, historical trends and current intervention alternatives for the nation's leading health issues. Client case studies will be used to engage students in problem-solving scientifically sound interventions that examine the environmental, socio-cultural, behavioral, and biological determinants of health.

*Prerequisites: grade of C-: (1.67) or better in BIOL 104 and BIOL 104L*

### **ECBIO-316 (Formerly S465) 3-3-4**

#### **Wildlife Ecology and Conservation**

This course is an international overview of current strategies used for wildlife conservation of mammals, birds, fish and other vertebrate species. Population ecology, habitat, disease, foraging and behavior will be covered in depth. Students will research the historical, legal and economic foundation for current best-management practices. Through intensive field studies, students will compare and contrast scientific-field techniques used in wildlife management.

*Prerequisite: grade of "C" or better in ECBIO-301*

### **ECBIO-318 (Formerly S468) 3-0-3** **Urban Ecology, Restoration & Planning**

Natural lands and natural systems occur in densely populated areas and because of the human impacts present vast challenges to the landscape architects and environmental planners who are entrusted with their protection and enhancement. This course studies in detail urban ecological systems and the human

impacts that shape them. The student will also be exposed to current restoration techniques, which are being utilized in the urban setting to restore natural ecological functioning to the city.

*Prerequisites: SCI-101, or grade of "C-" (1.67) or better in BIOL-104 and BIOL-104L, or permission of instructor*

**ECBIO-319 (Formerly S454) 3-0-3**  
**Oceanography**

An introduction to the biological, chemical, geological and physical aspects of the ocean environment with particular emphasis on the importance of the oceans to human beings and the impact we have on them. Students may participate in an optional field trip highlighting estuarine/coastal biodiversity, aquacultural techniques and oceanographic sampling techniques.

*Prerequisite: SCI II which is completion of any two of the following courses: SCI-101, SCI-102, BIOL-101, BIOL-103, CHEM-101, CHEM-103, PHYS-101 or PHYS-201*

**ECBIO-391 (Formerly S491) 0-9-3**  
**Research I in Environmental Science**

Independent research is taken under the guidance of a faculty member. The research will include a written proposal prior to initiation of the project, a literature search, experimental fieldwork, a written abstract and report at the end of the semester and an oral presentation of the work. Guidelines for approval and for final evaluation are available in the College of Science, Health and the Liberal Arts office.

*Prerequisite: permission of the academic associate dean of undergraduate programs in the College of Science, Health and the Liberal Arts..*

**ECBIO-392 (Formerly S492) 0-9-3**  
**Research II in Environmental Science**

Continuation of ECBIO-391.

*Prerequisites: ECBIO-391, permission of the academic associate dean for undergraduate programs in the College of Science, Health and the Liberal Arts.*

**ECBIO-415 (Formerly S455) 3-0-3**  
**Natural Resource Management**

*(writing intensive)*

This course explores the existing state of the world's natural resources including forests, fisheries, rangeland, soil, water, wildlife, air and energy. Management options for each resource will be explored in depth. Field trips will compare cost, impact and implementation of different approaches used by environmental agencies. Students will write and present a resource-management plan for a key issue.

*Prerequisite: ECBIO-301*

**ECON-205 (Formerly E821) 3-0-3**  
**Macroeconomics**

Introduction to the overall functioning of an economic system with a view toward understanding the factors underlying income, employment and prices on the aggregate level. Topics include monetary and fiscal policy with primary emphasis on the impact of international trade and policy implications.

**ECON-206 (Formerly E822) 3-0-3**  
**Microeconomics**



Introduction to the principles underlying the behavior of business firms, resource owners and consumers within a system of markets. Introduces the theory of value and distribution and the implications of international trade on autarchy value and distribution.

**ECON-305 (Formerly E843) 3-0-3**

**Money, Banking and Monetary Policy**

Banking theory and the impact of the Federal Reserve. Monetary management: current developments and limitations. International aspects are considered.

*Prerequisites: ECON-205, ECON-206*

**ECON-315 (Formerly E842) 3-0-3**

**Intermediate Price Theory**

Analysis of the determination of prices with varying degrees of competition. Determination of wages, rent, interest and profit.

*Prerequisites: ECON-205, ECON-206*

**ECON-381 (Formerly E899) 0-0-3**

**Independent Study in Economics**

Intensive independent study of a chosen subject. The student is expected to read a substantial number of major works in the field and to prepare a critical, documented paper. See the statement on Independent Study under "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Prerequisites: permission required. See appropriate form available online at University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

**ECON-401 (Formerly E864) 3-0-3**

**International Economics**

The theoretical basis for international trade is examined, as well as the economic impact of such trade on participating nations.

**EDVS-221 (Formerly ARCH-421) 3-0-3**

**Introduction to Historic Preservation**

This course provides an introduction to the field of Historic Preservation. The goals include: development of discipline-specific terminology; overview of preservation law, policies, and advocacy; analysis of current issues relative to sustainability, preservation and adaptive reuse. Field trips to sites and guest speakers complement lecture/discussion format.

*Prerequisites: ARCH-102 or INTD-102 or LARCH-102*

**EDVS-266 (Formerly ARCH-466) 2-2-3**

**Preservation Technology 1**

Buildings are composites of materials with unique properties and characteristics. This course provides a comprehensive overview of the materials used in the construction of historic structures and the ongoing processes of material deterioration. Through hands-on case studies, students acquire the skills to evaluate and diagnose the physical problems afflicting historic structures and to recommend conservation and stabilization methods using traditional and contemporary techniques.

*Prerequisite: ARCH-102 or INTD-102, or LARCH-102*

**EDVS-300 (Formerly ARCST-300) 2-2-3**  
**Exhibition Design and Planning**

The renaissance of museums, product display, and exhibitions has made the making of exhibitions a significant, recognizable, and highly valued skill as well as profession. This course covers the fundamentals of exhibition design, as well as its history, theory and practice. Through the use of lecture based case studies, field trips to exhibitions, and studio work, students will not only learn to develop, design, build, and document exhibitions, but to prepare written design proposals, didactic exhibition material, and exhibition critiques. Emphasis will be on the narrative used to create exhibitions, employing scale, color, materials, lighting, sound and graphics.

*Prerequisite: ARCH-102 or INTD-102 or LARCH-102 or DSGNFND-203 or INDD-102*

**EDVS-302 3-0-3**  
**Archival Research for Historic Preservation**

Preservation practice relies upon archival, physical, and ethnographic evidence as a basis for establishing historic significance. This course affords in-depth study of the techniques, strategies, and resources employed by preservationists to collect data, using written, graphic, and oral primary and secondary sources. Lectures, discussions, and field trips to key archival repositories provide students with first-hand experience in collecting and interpreting documentary evidence to develop historical narratives in accordance with National Register of Historic Places standards.

*Prerequisite: EDVS-221 (formerly ARCH-421) Intro to Historic Preservation or permission of program director.*

**EDVS-324 (Formerly ARCH-424) 2-2-3**  
**Historic Preservation Documentation: Drawing**

Begun in 1933, the Historic American Building Survey (HABS) is the first federal preservation program established to document America's architectural heritage. In this course, students learn the fundamentals of HABS documentation methods for the production of archival records of historic structures and places, utilizing technical drawing skills, both hand drafting and computer-aided drafting (CAD). Through field work and labs, students survey, sketch, draft, research, and annotate comprehensive, technically proficient drawings that represent the salient aspects of historic structures, complexes and sites in accordance with HABS standards.

*Prerequisites: ARCHDSN-208*

**EDVS-341 (Formerly ARCH-341) 0-2-1**  
**American Architecture**

What makes the built environment in America unique? How has American design changed over the generations? What were architects, clients, and critics thinking? Where will American architecture go in the future? Using history, sociology, and the humanities, we will address these types of questions as we examine American architecture according to themes such as the iconic American home, public buildings, buildings for work and play, and American architectural practice.

*Prerequisites: AHIST-206 or LARCH-206*

**EDVS-409 (Formerly ARCH-409) 3-0-3**  
**The Great American City**

The American city is examined from multiple viewpoints — historical, theoretical and critical — and with respect to specific communities, as well as to general issues. Themes include the initial founding of settlements and their growth, the architectural character of the communities and how character relates

to the socioeconomic and physical environments, and the contribution of all these factors toward the specific image or reputation associated with America's best known or "most typical" cities and towns. Field trips vary by semester and are required.

*Prerequisites: AHIST-206 or LARCH-411*

**EDVS-410 (Formerly ARCH-410)                      3-0-3**  
**Vernacular Architecture**

This elective course provides the groundwork for the study of architecture built without architects or in some other way, unlike the buildings that comprise the standard architectural canon. Scholars estimate that 95 percent of buildings fall into this category. Depending on faculty expertise, focus will be on national and regional traditions, non-Western traditions or a combination of the two. Examples of vernacular architecture will be examined in the context of their materials, building technology, climate and culture.

*Prerequisite: AHIST-206 or LARCH-206 or approval of the instructor*

**EDVS-422 (Formerly ARCH-422)                      3-0-3**  
**Theories of Architecture: Seminar**

This seminar will focus on selected topics that characterize architectural theory during the "Modern" era — from the late-19th century to the present. As a historical survey of the fundamental principles that have shaped architectural thinking, the course will review, in a critical way, the major issues that have influenced both the meaning of and the practice of architecture during that time: the relationship of architects to their work and to the culture-at-large; the impact of technology and politics; and the spatial experience of a building. Theorists' critiques of contemporary practice will be emphasized, and current theories will be explored in an attempt to clarify an approach to the study and practice of architecture.

*Prerequisites: AHIST-306 or LARCH-411*

**EDVS-425 (Formerly ARCH-425)                      3-0-3**  
**Meaning in Architectural Ornamentation**

This elective course raises some theoretical questions that are relevant to contemporary practice. What is ornament? How and why have attitudes toward architectural ornamentation changed through history? Is ornament essential to architecture? Lectures will be presented following a reconstructed chronology of theoretical topics; from the things (*res materialis*) of which architecture consists; to the "rules" and "abuses" of classical ornament; to the role of imitation; to the effects of the Industrial and Post-industrial Revolutions on theories of ornament. The relationship between the forms and the materials of ornament will be examined in lecture and group discussions.

*Prerequisite: AHIST-206 or LARCH-411*

**EDVS-428 (Formerly INTD-428) 2-2-3**  
**Restoration/Rehabilitation Interiors**

This is a lecture/lab course in which students work with period and historic spaces. The course introduces students to theories and techniques of adaptation and preservation of period spaces, preserving their historical integrity. The course will deal with applicable building codes, National Park Service standards of rehabilitation, designing within ADA guidelines and use of appropriate materials and lighting.

*Prerequisites: AHIST-305 or LARCH-307*

**EDVS-434 (Formerly ARCH-434) 3-0-3**  
**Water and Architecture**

The rich architecture of public water in urban and rural contexts is a key to the cultural landscape. From the gravity systems of a Roman city, through the rich world of medieval water, and concluding with water powered by outside energy, we will study Western, Arab and Asian water systems. Through architecture, the course will link the technology of water cycles, purity, collection and storage with the aesthetics and rituals of culture.

*Prerequisite: SOC-2XX*

**EDVS-471 (Formerly ARCH-371) 3-0-3**  
**Design Theory: Special Topics**

This upper-level course is organized to take advantage of faculty members' expertise and the interests of the student body. All topics chosen require that students have completed basic courses in architectural history and theory, so that this course can focus on (1) an advanced analysis of theoretical texts in architecture, literary texts and buildings; and (2) an examination of architecture as a cultural discipline that seeks to accommodate contemporary human needs and natural situations.

*Prerequisite: AHIST-306 or LARCH-411*

**ENGR-101 3-2-3**

**Introduction to Engineering**

This course is an introduction to engineering through hands on use of design, build and test modules in mechanical, industrial and architectural fields. The course helps the students to relate basic sciences to engineering applications. The course makes an introduction to programming logic, engineering design, materials, workshop skills, engineering ethics and technical presentation. Visits to engineering industries and professional society meetings will be arranged.

*Prerequisites: None*

**ENGR-102** **2-2-3**  
**Engineering Drawing**

This course introduces students to engineering drawing, descriptive geometry, design and problem solving. Engineering drawing is a graphic language that can convey, with exactness and detail, ideas from the design engineer to the fabricator. Thus, the emphasis of the course is on communicating design ideas through engineering drawings.

*Prerequisites: MATH-102 or MATH-111*

**ENGR-104** **3-0-3**  
**Introduction to Computing**

An introductory course which provides a coherent and comprehensive treatment of fundamental concepts of computer science. It describes how computing systems work and how they are applied to solve real-world problems. The main emphasis is on the design of algorithms and procedural abstraction. High-level, language-programming projects.

**ENGR-210** **3-0-3**  
**Introduction to Materials Science**

Atomic theory and molecular bonding of solids, polymer structure and mechanics of materials for textiles are taught at an introductory level. Specific processing issues including additives, viscosity, transitions and morphology are studied as well.

*Prerequisites: MATH-111, CHEM 103 and CHEM 103L*

**ENGR-215** **3-0-3**  
**Engineering Statics**

Engineering statics describes the mechanical behavior of materials and systems in equilibrium using Newton's laws of motion. In this course, students will learn the principles of force equilibrium, how to construct free-body diagrams, understanding distributed forces, friction and introductory structural response.

*Prerequisites: PHYS-201 and PHYS 201L, MATH-213 (pre- or co-requisite)*

**ENGR-217 (also listed as MIS-302)** **3-0-3**  
**Information Systems Design**

Analysis and design of computer-based information systems. Definition of databases, measures of effectiveness, management-staff interfaces. Focus on analyzing the situation and its particular needs before attempting a solution. Case studies from engineering, manufacturing and service environments used to create discussions. *(ISE majors can take this course in the School of Business Administration as MIS-302)*

*Prerequisites: MATH-112*

**ENGR-218** **3-0-3**  
**Engineering Dynamics**

Engineering dynamics describes the motions of particles and rigid bodies and the forces that accompany or cause those motions. Basic methods include Newton's laws, the work and energy principle, and the impulse and momentum principle.

*Prerequisites: ENGR-215, MATH-225 (pre- or co-requisite)*

**ENGR-301** **3-0-3**



This course is a continuation of EN505 Engineering Statistics, and it is required for the BSISE and the BSE with minor in ISE. It focuses on the application of statistical techniques to industrial problems; relationships between experimental measurements using regression and correlation theory and analysis of variance models; design of experiments with one and more than one levels; emphasis on inherent variability of production processes; control chart techniques and the use of exponential and Weibull models in reliability analysis; and statistical process control.

*Prerequisite: ENGR-305*

**ENGR-308** **3-2-3**  
**Integrated Engineering Product Development I**

The IEPD two-course sequence combines the perspectives of design, engineering and marketing in the product development process in a hands-on, collaborative environment. Throughout the course students will be working in groups to design, develop, prototype and analyze economic and marketing aspects of engineered products. Students will be prepared to use modern engineering tools including rapid prototyping, CNC machine tools, CAD-based product lifecycle analysis and management, costing and market data analysis.

*Prerequisite: MATH-112, ENGR-104 and ENGR-102*

**ENGR-309** **3-2-3**  
**Integrated Engineering Product Development II**

In the second semester of the IEPD course students will be primarily working on their group projects. Opportunities to work on industry sponsored projects or internally developed projects of current interest will be provided. Periodically students will present their progress on the project in discussion forums. The use of engineering drawings, charts and graphs, simulations and media will be encouraged and evaluated. Industry veterans will provide guest lectures in manufacturing practices, standards, regulations, ethics and management. Through a series of guest lectures, students will also develop an appreciation for patents and intellectual property.

*Prerequisite: ENGR-308*

**ENGR-311** **3-0-3**  
**Fluid Mechanics**

This course explores the fundamentals of fluid mechanics, including such topics as fluid statics, control-volume analysis, the Navier-Stokes equations, similitude, viscous, inviscous and turbulent flows and boundary layers.

*Prerequisite: ENGR-218, PHYS-203 and PHYS-203L*

**ENGR-314** **3-0-3**  
**Numerical Methods for Engineers**

Numerical methods are used to solve mathematical problems that are often impossible to solve analytically. Numerical methods enable formulating engineering problems so that they can be solved by arithmetic operations. Problems with large systems of equations, nonlinearities and complicated geometries that are encountered in engineering can be solved by the use of numerical methods and programming using computers. The emphasis of this course is the use of personal computers to solve mathematical problems.

*Prerequisite: MATH-225 and ENGR-104*

**ENGR-316** **2-2-3**

**Introduction and Materials for Composites**

An overall introduction to composites will be presented including their mechanical properties and advantages. Fiber reinforcements will include pre-pregs and textile composites. Composites design and various molding techniques will be covered. The laboratory will have various manufacturing and experimental exercises.



*Prerequisite: ENGR-215*

**ENGR-322** **3-0-3**  
**Fundamentals of Electrical Engineering I**

This course explores the analysis of circuits; transient and steady state phenomena; and general analysis techniques; and the fundamentals of direct and alternating circuits, transformers rotating machinery, electrical and electronic control, and electrical energy.

*Prerequisite: PHYS-203 and PHYS-203L*

**ENGR-371** **(3-0-3) or (1-5-3)**  
**Special Topics in Engineering**

An upper-level course designed to take advantage of resident/adjunct/visiting faculty members' expertise or a special focus wanted by the School for one or two terms. These courses might provide an in-depth treatment of recent advances in subjects of current interest in a given field whose subject matter is not necessarily needed to be offered long term. A specific "topic" may be delivered a maximum of two terms.

*Prerequisites: Announced prior to registration*

**ENGR-381, ENGR-382** **0-0-3**  
**Independent Study in Engineering I and II**

For details, see description of Independent Study in "University Academic Policies and Procedures: Common Academic Policies for All Students." For engineering students only

Permission required. Also see appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

**ENGR-498** **2-2-3**  
**Senior Design Project I**

This course exposes the students to a series of real-world industry problems that require applications of Industrial Engineering principles. A preliminary analysis of various selected problems will be performed collectively. The students will then form a team and select their senior design project. The course also covers (through invited speakers) topics related to the engineering profession such as ethics, intellectual property, project management and social responsibility. Students will present a written and oral proposal of their senior design project preparation.

*Prerequisite IENGR-315, at least 86 credits, and WRTG-21X*

**ENGR-499** **1-5-4**  
**Senior Design Project II: Engineering, Architectural Engineering, Industrial Systems Engineering, Mechanical Engineering**

*(writing intensive)*

Students in this course will apply engineering principles to solve a real-world problem. Student works as member of a team assigned to a problem in a manufacturing, processing, service or government organization. The capstone senior design project will consist of a project that builds on engineering, business, ethics and social issues. This course requires a professional written and oral report and will serve as the program's major writing intensive course.

*Prerequisites: Completion of at least 90 credits, senior level and WRTG-21X (This capstone course is major specific); ENGR-498 ISE only*

**FASHDES-211 (Formerly T918)** **1-5-3**  
**Garment Structures**

This is the initial course in the fashion design technical studio sequence. This course focuses on the study and production of apparel construction methods. Students have the opportunity to produce garments and design them through the imaginative use of construction details. A sample book of various industrial construction methods is developed.

*Note: A minimum grade of "C" will be required in order to continue in the design studio sequence. Admission into the Fashion Design Program. Fashion Industry majors need approval from FMM program director.*

**FASHDES-213 (Formerly T920)** **1-5-3**  
**Pattern Development I**

This course covers the fundamentals of the flat-pattern method. Students will draft bodice, sleeve and skirt blocks to be used in creating various styles. Some patterns are cut and sewn in muslin to test fit and further enhance sewing skills. A sample book of flat-pattern techniques will be produced. In addition, two ensembles will be designed and produced.

*Prerequisites: a grade of "C" or better in FASHDES-211. Admission to the Fashion Design Program. Fashion Industry Management majors need approval from FMM program director.*

**FASHDES-250 (Formerly T940)** **0-0-3**  
**Fashion Studies Abroad**

A "short course" that enables students to study various aspects of fashion design, production and merchandising in a major region of the world. Through a series of lectures, guided tours and visits to couture and ready-to-wear establishments, design studios, retailers, production plants and museums, students have the opportunity to experience a segment of the global fashion industry. Students carry a journal and write about their own experiences abroad. A visual record of design inspirations is required as part of the research assignments. Oral and written reports, including visuals, explore the design and business practices of apparel firms. Students also experience cooperative design and merchandising as a result of team assignments.

*Prerequisites: student must have a 2.5 G.P.A. and major in Fashion Design, Fashion Merchandising, Fashion Industry Management or Textile Design program. Student status will be determined by the program offered.*

**FASHDES-252** **2-2-3**  
**Fashion Design Research**

This required course focuses on methods of research and development of original concepts in the fashion design field. Visual sensitivity to the environment as a source for building observational skills, design literacy, visual documentation, and concept development skills will be addressed. Visits to design resources such as museums, architectural sites, analysis of trend forecasts and current influences will provide inspiration for development of a journal for application in future courses.

*Prerequisites: DRAW-206, VSDES-101 or DSGNFND-103, and DSGNFND-203*

**FASHDES-300** **2-4-3**  
**Technical Design**

This course will enable the student through hands on experience to understand the basic requirements needed to be successful in the area of technical design. Building on their knowledge of pattern, construction and design, students will learn to create technical specifications packages used for product data management. Students will further acquire an advanced understanding of terminology and technical vocabulary needed to communicate with manufacturing facilities throughout the world. Students will learn the process of developing garment specifications, conducting fittings and successful communication for quality assurance issues to vendors and manufacturing personnel worldwide.

*Prerequisites: CAD-204, a grade of "C" or better in FASHDES-311.*

**FASHDES-311 (Formerly T921) 1-5-3**  
**Pattern Development II**

Students learn to drape basic bodice and skirt variations on standard industrial dress forms. Original garments are designed, draped and sewn using industrial machinery. Accurate patternmaking, sewing and attention to design fundamentals are stressed throughout the course.

*Prerequisites: a grade of "C" or better in FASHDES-213. Admission into the Fashion Design Program. Fashion Industry Management majors need approval from FMM program director.*

**FASHDES-316 (Formerly T720) 2-4-3**  
**Fashion Design**

This course focuses on the key components of the fashion design process including research, trend forecasting, materials investigation and presentation of valuable, market-specific collections. Designers consider current market trends and design concepts as influences on merchandising. Extensive opportunities for the development and communication of a personal design vision in illustrated presentations helps students build portfolio-ready collections. Industry directed projects also provide opportunities to develop brand-conscious yet creative concepts and designs. CAD skills are utilized in a variety of presentational techniques.

*Prerequisites: CAD-204, FASHDES-252, FASHDRW-207*

**FASHDES-317 1-5-3**  
**Hand Knitting for Fashion Design**

This elective course is offered to expand construction skills and design possibilities. By hand knitting and/or crocheting, students will design and produce marketable garments to augment other collections or as individual pieces.

*Prerequisites: FASHDES-311 Draping Design and Construction; TEXT-101 Survey of the Textile Industry*

**FASHDES-322 (Formerly T291) 2-2-3**  
**Fashion Design Problem Solving**

This course focuses on experimental design and is a continuation of the design foundation sequence for Fashion Design majors. Students are provided the opportunity to think creatively, to develop alternate approaches in problem solving and to select optimum solutions on a cost/aesthetic/materials basis. Through materials investigation, this course promotes the use of creative answers to the basic design problem of covering the body.

*Prerequisites: FASHDES-252, FASHDRW-207, FASHDES-311*

**FASHDES-335 (Formerly T923) 1-5-3**  
**Pattern Development III**

Students will manipulate basic blocks to develop original designs for various markets. Emphasis will be placed on industry standards as they apply to fit and proper construction techniques. One original design will include using a two-way stretch fabric.

*Prerequisites: "C" or better in FASHDES-311. Admission into the Fashion Design program. Fashion Industry Management majors need approval from FMM program director.*

**FASDES-336** **1-5-3**

**Costume Design: Film and Stage**

A studio course that offers fashion designers an opportunity to learn the basic process of costume design through the research, development and construction of an original costume design. Character and script analysis will be covered in addition to working effectively with directors and other collaborators. This course explores researching period costumes and uses appropriate construction techniques while considering comfort and durability for a modern theatre or film production.

*Prerequisite: FASHDES-311, FASHDRW-207, ARTH-314*

**FASHDES-337 (Formerly T922)** **1-5-3**

**Tailoring**

Students are introduced to tailoring techniques. Patterns for a tailored garment are drafted according to the industry's standards. Construction of garments on industrial machinery uses current production technology.

*Prerequisite: FASHDES-311*

**FASHDES-371 (Formerly T939)** **1-5-3**

**Special Topics in Fashion**

A topic of special interest to fashion students and faculty will be explored in a studio/lecture format. Topic will vary, to be chosen by the instructor.

*Prerequisite: will be determined by the subject of the course offered*

**FASHDES-415 (Formerly T925)** **1-7-4**

**Collection Development I**

A capstone course for senior fashion designers to develop and produce a portfolio of original designs. The collection is designed, merchandised and produced by the student in collaboration with the instructor and a visiting critic.

*Prerequisites: FASHDES-322, FASHDES-316, grade of "C" or better in FASHDES-311 and FASHDES-335. Admission into the Fashion Design Program. Fashion Industry Management majors need approval from FMM program director.*

**FASHDES-416 (Formerly T926)** **1-7-4**

**Collection Development II**

Students will further develop the concepts from their original sources of inspiration from FASHDES-415, Collection Development I, creating a cohesive collection of clothing. This is also an opportunity for the student who wishes to investigate designing for a different market from a new inspirational source.

*Prerequisite: a grade of "C" or better in FASHDES-335 and FASHDES-415*

**FASHDES-419 (Formerly T725)** **1-5-3**

**Accessories**

The area of accessories presents excellent opportunities for the creative designer. The accessories market (hats, scarves, belts, handbags and jewelry) is growing and is in need of creative and qualified talent. "Accessories" is an elective for the student interested in pursuing a career in this market and/or for the student who, as a designer, is interested in the creation and coordination of the total ensemble.

*Prerequisites: FASHDES-252, FASHDES-211*

**FASHDES-433 (Formerly T722) 1-5-3**  
**Fashion Layout and Portfolio Development**

This elective course provides fashion design students with a professional portfolio of original work showcasing their design abilities and illustration finesse. The concept of layout and design will be presented as it relates to newspaper advertisements, editorial illustration and brochure development. Various presentational techniques will also be addressed as an effective sales tool for seasonal collections.

*Prerequisite: FASHDRW-207*

**FASHDES-441 (Formerly T924) 1-5-3**  
**Couture Techniques**

This elective teaches the various methods of creating and constructing a couture garment. Students will learn how to combine custom designing, patternmaking methods, machine and hand skills to execute an ensemble of clothing in the style of selected couture designers.

*Prerequisites: FASHDRW-207, FASHDES-311*

**FASHDRW-207 (Formerly T715) 1-5-3**  
**Fashion/Figure Drawing**

Students review basic forms of the figure in an anatomical, gestural and design sense. In a studio setting, students develop the skills and vocabulary of design room and presentation sketching by drawing from live models, developing designer croquis and technical drawings, exploring various media and rendering fabrics.

*Prerequisite: DRAW-206*

**FASHDRW-317 (Formerly T716) 1-5-3**  
**Fashion Illustration I**

This course enhances drawing skills for fashion design students who are interested in further developing their illustrations and applications in the field of fashion design. Students do extensive fashion model studies and develop several visual presentations related to concepts and techniques presented in class. Presentation techniques and portfolio presentation will also be addressed.

*Prerequisite: FASHDRW-207*

**FASHDRW-319 (Formerly T721) 1-5-3**  
**Fashion Illustration II**

This sequel to FASHDRW-317 is designed to challenge and refine the fashion design student's illustration skills as they relate to the professional job market. Extensive fashion-model studies will be combined with assignments similar to those found in today's industry. Professional presentation skills and portfolio development will be emphasized.

*Prerequisite: FASHDRW-317*

**FASHMGT-101 (Formerly T901) 3-1-3**

## **Survey of the Global Products**

Survey of the apparel industry presents a comprehensive overview of one of the most dynamic industries in the world including marketing strategies, product-line development, pre-production and production processes, quality assurance, international sourcing, supply chain management and distribution strategies. This course investigates the application of technology in all areas of the operations of an apparel enterprise. Survey establishes the basis for further study of the apparel industry. The term project, which simulates the formation and operation of an apparel enterprise, provides a theoretical as well as a practical learning experience.

*Prerequisite: TEXT-101*

### **FASHMGT-201 (Formerly T917) 1-5-3** **Prototyping**

Students will have a basic understanding of garment construction combined with flat-pattern concepts. The use of industrial equipment and basic slopers will be utilized to produce a sample book of construction details and garments. Students will also create a pattern and construct a non-apparel item (ex. handbag).

*Any student who has received credit for FASHDES-211 or FASHDES-213 may not take this course.*

### **FASHMGT-305N (Formerly FASHMGT-305, T904) 3-2-3** **Production**

Basic operations in all segments of an apparel plant are studied from the initial receipt of raw materials through storage, inspection, marker making, spreading, cutting, sewing, pressing, warehousing, shipping and customer returns. Latest technological advances in each of these areas will be discussed with marker making performed on a Gerber Accumark 300 System. Inventory management, labor issues, ergonomics and relevant public policies are also studied.

*Prerequisites: FASHMGT-101, FASHMGT-201 or FASHDES-211*

### **FASHMGT-308 3-0-3** **Global Product Management**

Global Product Management is a combination of classroom lectures and experiential instruction in a global environment. Students' tour design houses, mills, dye houses and production facilities, and examine international retailers. Students learn how to assess manufacturers for compliance and engage in cultural activities. Another major component of the course is to observe the economic state of the apparel industry in the specified country and study sustainable methods for manufacturing apparel, home textiles and other products.

*Prerequisite: TEXT 101 Survey of Textiles or with the necessary approval from a Program Director*

### **FASHMGT-401 (Formerly T916) 3-0-3** **Apparel/Textile Quality Assurance**

This course will develop an understanding of the intricate interdependence of fiber content, yarn properties, fabric structure and the applied finish required to produce saleable products offered at a "fair" value per dollar expenditure. Apparel Quality Assurance integrates the knowledge gained in textile, apparel, business and humanities courses to develop managerial talent in any "cut and sew" aspect of the fashion industry.

*Fall only.*

*Prerequisites: TEXT-301, FASHMGT-305 and STAT-201*

**FASHMGT-408 (Formerly T912) 3-0-3**  
**Apparel/Textile Sourcing**

*(writing intensive)*

Execution and delivery of a product in today's apparel supply chain occurs within a global environment. Understanding the complexities in establishing and maintaining sourcing strategies is a critical element in a student's portfolio of course work.

*Prerequisite: FASHMGT-101 or FASHDES-316 and at least 21 credits in the student's major.*

**FASHMGT-437 (Formerly TEXT 437) 3-0-3**  
**Integrated Technology**

The course will analyze the various manufacturing technologies and their implications on management philosophy, employee relations and profitability through lectures and literature searches. The student will be a member of a team that will analyze and present to top management a feasible plan for integrating manufacturing technology.

*Prerequisites: FASHMGT-305*

**FASHMGT-451 (Formerly T197) 3-0-3**  
**Operations and Supply Chain Management**

This course provides a comprehensive survey of production and service operations management with an emphasis on the fashion/retail industry supply chain. It focuses on mathematical methods and the case study approach to formulate, analyze and solve various supply chain problems. Areas of study include decision analysis, forecasting techniques, inventory and scheduling models, statistical quality control, aggregate planning, material requirements planning, linear programming, transportation and transshipment problems. Excel will be used extensively in this course.

*Prerequisites: MGMT104, DECPROC101, DECFRM 200, MATH 103 or MATH 111; pre-or co-requisite STAT 202 or MATH 111.*

**FASHMGT-499 (Formerly T909) 3-0-3**  
**Apparel Merchandising Management**

*(writing intensive)*

Management of the merchandising function in an apparel company, including the development of a product line, design coordination, costing, sample making, specifications, resource selection, forecasting sales and planning inventory levels, promotion and coordination with sales and production are included.

*Prerequisite: WRTG-21X, FASHMGT-101 or FASHDES-316 and completion of 90 credits with at least 21 credits in either the Apparel or Fashion core courses, or permission of the instructor*

**FINC-301 (Formerly B642) 3-0-3**  
**Financial Management**

This course provides an introduction to finance that examines the role of the financial decision maker at the corporate level. Four basic questions are examined: the goal of the firm, investment decisions of the firm, financing decisions of the firm and dividend decisions of the firm. The technique of discounted cash-flow analysis is developed and emphasized as it relates to corporate financial decisions.

*Prerequisites: ACCT-101 and STAT-201 or MATH-101*

**FINC-303 (Formerly B643) 3-0-3**

### **Intermediate Financial Management**

An in-depth study of financial analysis and planning, asset management and capital structures. Financial decision making is studied by means of finance cases. Computerized financial analyses are part of the course.

*Prerequisites: FINC-301*

#### **FINC-313 (Formerly B633) 3-0-3** **Financial E-Commerce**

This course focuses on electronic payments between businesses and between businesses and consumers. Topics include acceptance of electronic payment, security of electronic payment transfer, ensuring transaction integrity (detecting and correcting violation of electronic payment instructions — also referred to as “secure electronic transaction protocol”), exchange-rate calculations for foreign currencies and integrated Internet versus non-Internet payment systems.

*Prerequisite: FINC-301*

#### **FINC-318 (Formerly B645) 3-0-3** **International Finance and Development**

This is an advanced course that explores the interrelations between the economic theory of growth/development and financial applications in the emerging countries.

*Prerequisites: FINC-301, ECON-205, ECON-206*

#### **FINC-321 (Formerly B661) 3-0-3** **Investments and Portfolio Management**

This course explores the process of comparative security valuation analysis. The emphasis is on risk-return trade-off, principles of portfolio management and the process of security analysis.

*Prerequisite: FINC-301*

#### **FINC-322 (Formerly B641) 3-0-3** **Capital Markets and Financial Institutions**

This course explores depository and non-depository financial intermediaries, flow of funds into the money and capital markets.

*Prerequisite: FINC-301*

#### **FINC-333 (Formerly B662) 3-0-3** **Public Finance**

This course explores sources of public funds, taxation and the debt. Uses of public funds, budgets and the control of government expenditures.

*Prerequisites: FINC-301, ECON-205, ECON-206*

#### **FINC-381 (Formerly B699) 0-0-3** **Independent Study in Finance**

This course is an intensive independent study of a chosen subject. The student is expected to read a substantial number of major works in the field, may be required to do primary research and must prepare a critical documented paper.



See statement on Independent Study in the “University Academic Policies and Procedures: Common Academic Policies for All Students.”

*Prerequisites: permission required, see appropriate form online at University Registrar’s webpage <http://www.philau.edu/registrar/> for more information.*

**FINC-411 (Formerly B663) 3-0-3**  
**Finance Seminar**

In a seminar setting, drawing on the knowledge of the fundamentals and advanced concepts studied in finance classes, students in this course will develop skills to become a better decision maker by learning how to integrate the various topics of finance. Through problem-oriented exercises, students will develop an appreciation of the importance and know-how of anticipating, recognizing and adapting to external forces in the decision-making process and organization. Finance as a functional area is dynamic, and emphasis will be placed on incorporating the most recent academic and practitioner literature, which is of theoretical and practical importance in the decision-making process. This challenging course is built around readings, finance cases, research papers and problem sets; and includes group and individual assignments and written and oral presentations.

*Prerequisites: senior status, Co-requisites: FINC-322 or ECON-305, FINC-303, FINC-321*

**FREN-101 (Formerly L343) 3-0-3**  
**French I**

A beginner’s course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**FREN-201 (Formerly L643) 3-0-3**  
**French II**

A beginner’s course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of “C” or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**FREN-301 (Formerly L743) 3-0-3**  
**French III**

A beginner’s course designed for students who have completed two semesters of college-level language or the equivalent. The focus is on advancing oral expression, listening comprehension and the development of reading and writing skills, so that students can gain confidence and express themselves

fluidly entirely in the target language. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: grade of "C" or better in -201 or a minimum of three years of prior high school foreign language study or permission of the instructor.*

**FREN-401 (Formerly L843) 3-0-3**

**French IV**

An intermediate course that provides students with the opportunity to communicate in a fluent and sophisticated manner. The focus is on expanding the knowledge of structures and vocabulary that students have acquired in levels I-III. In addition to constant attention to speaking, writing, listening and reading, more complex ways of expression are also emphasized. Contemporary culture is explored through authentic visual media and written materials.

*Prerequisite: Grade of "C" or better in -301 or a minimum of four years of high school language study or permission of the instructor.*

**GER-101 (Formerly L345) 3-0-3**

**German I (offered infrequently)**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**GER-201 (Formerly L645) 3-0-3**

**German II (offered infrequently)**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**GRAPH-201 (Formerly G311) 0-8-4**  
**Design III for Graphic Design Communication**

This course is an introduction to the methods, materials and vocabulary used in the communication design profession. This studio emphasizes form analysis, visual abstraction, visual metaphor and concepts in design.

*Prerequisite: grade of "C" or better in DSGNFND-203 or VSDES-101 or permission of the director of the Graphic Design Communication program*

**GRAPH-202 (Formerly G312) 0-8-4**  
**Design IV for Graphic Design Communication**

This course introduces the student to typography and its uses through sequential studies to support the building of a visual vocabulary. Students will examine the individual letterform, letters in combination and large bodies of text with a concentration on the grid, hierarchy, legibility and clarity of conceptual communication.

*Prerequisite: grade of "C" or better in GRAPH-201 or permission of the director of the Graphic Design Communication program*

**GRAPH-208 3-0-3**  
**History of Graphic Design**  
*(Writing Intensive)*

This course will chronicle the evolution of modern Graphic Design through an in-depth survey of human visual communication, beginning with the invention of writing and communication, through the creation of the Gutenberg Press and culminating with the study of the contemporary digital age. Discussion will focus on the function of Graphic Design to communicate and meet human needs with an emphasis on the influence of technology and the evolving role of design in business.

*Prerequisite: WRTG-101 AND ARTH-101 OR ARTH-102.*

**GRAPH-301 (Formerly G511) 0-8-4**  
**Design V for Graphic Design Communication**

This course will build on learning objectives and skills acquired in Design IV to advance students' typographic skills. Emphasis will be placed on the complex interplay of visual meaning and form and typographic sensitivity within a historical context.

*Prerequisite: grade of "C" or better in GRAPH-202 or permission of the director of the Graphic Design Communication program*

**GRAPH-302 (Formerly G512) 0-8-4**  
**Design VI for Graphic Design Communication**

This course will focus on the understanding and creation of cohesive branding systems through a systems approach to design with application to such items as a logo, stationery system, packaging, advertisement and other related collateral. The continued investigation of typography and its application will be stressed.

*Prerequisite: grade of "C" or better in GRAPH-301*

**GRAPH-305 (Formerly G641) 1-5-3**  
**Exhibit Design and Signage**

This course concentrates on the adaptation of graphic skills to three-dimensional structures and environments. Students will study structures and commercial systems available for product display, exhibit design and signage.

*Prerequisite: grade of "C" or better in GRAPH-202 or permission of the director of the Graphic Design Communication program*

**GRAPH-310 (Formerly G626) 1-5-3**  
**Digital Imaging and Photographic Manipulation**

This course will focus on enhancing or manipulating photographic images utilizing the computer. Students may create or import their own images with a scanner or digital camera, and use Photoshop tools and filters to enhance, alter or manipulate the image for artistic or design purposes.

*Prerequisite: ARCH-202 or INTD-202 or GRAPH-202 or INDD-202*

**GRAPH-320 (Formerly G637) 1-5-3**  
**Package Design**

This course will allow students to apply graphic knowledge to dimensional structures. Emphasis will be placed on the interplay between graphics and structures and the ability of structural design and materials to enhance conceptual communication.

*Prerequisite: grade of "C" or better in GRAPH-202 or permission of the director of the Graphic Design Communication program*

**GRAPH-341 (Formerly G644) 1-5-3**  
**Illustration**

This course includes original image making in a variety of techniques and media, including exploration of both computer design and traditional methods. Emphasis is placed on unity of concept and media and effective use of visual translation and metaphor.

*Prerequisite: grade of "C" or better in GRAPH-202 or permission of the director of the Graphic Design Communication program*

**GRAPH-381 (Formerly G991) 0-0-3**  
**Independent Study**

For further details, see general description of Independent Study in the "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Prerequisites: GRAPH-301 and permission of the Instructor, advisor, and the Director of the Graphic Design Communication program. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

**GRAPH-401 (Formerly G711) 0-12-6**  
**Design VII for Graphic Design Communication**

*(writing intensive)*

This course will focus on developing design concepts and establishing a visual language that will be applied to various formats while utilizing a systems design approach. The character of the project will support a unified theme/concept/idea for an identified client that is geared to a specific market or interest group. There will also be research and conceptual development work towards a written proposal for faculty review in preparation for the following semester's Capstone in Graphic Design project.

*Prerequisite: grade of "C" or better in GRAPH-302*

**GRAPH-407 (Formerly G631) 1-5-3**  
**Philadelphia University Design Workshop**

This course will provide students with an opportunity to work on real projects for real clients (University, non-profit and/or industry), thus offering a chance to gain valuable, practical experience while still in school. Students will work in interdisciplinary teams, gain exposure to client relations and the professional presentation of their work and be exposed to all levels of production as it relates to these projects. The course is open to junior and senior-level Graphic Design Communication and Interactive Design and Media students only upon prior portfolio review by the instructor.

*Prerequisite: Grade of C (2.00) or better in GRAPH 301 (for GD students) or DIGD 301 (for DD students). No students will be admitted to the course without prior portfolio review and by permission of the instructor.*

**GRAPH-408 (Formerly G634) 1-5-3**  
**Advanced Publication Design**

This course will focus on publication design and the continued development of projects with increased conceptual and physical complexity. The relationship between editorial content and design format will be explored. Original image-making through illustrative, photographic or any other means will be encouraged. The application of charts, graphs, tables and quantitative information will be investigated.

*Prerequisite: grade of "C" or better in GRAPH-202 or permission of the director of the Graphic Design Communication program*

**GRAPH-409 1-5-3**  
**Issues in Information Design**

This course introduces students to issues in the design and communication of typical information categories through a range of design, media, and scales. Topics are raised in the categories of cartography, comparative data and diagrams. Emphasis is placed on exploration, understanding and process.

*Prerequisite: GRAPH 202 or INDD 202*

**GRAPH-499 (Formerly G712) 0-12-6**  
**Capstone in Graphic Design Communication**

Students develop projects independently and are required to demonstrate ability and understanding of communication design theory, process and principles. The final project requires research of topic, design exploration, development and final professional presentation. The syllabus also requires the

development and presentation of a resume and a final portfolio of work selected from projects students have produced during their studies in the program.

*Prerequisite: grade of "C" or better in GRAPH-401 and faculty approval or permission of the director of the Graphic Design Communication program*

**GRAPH-208** **3-0-3**  
**History of Graphic Design**

*(Writing Intensive)*

The History of Graphic Design course will chronicle the evolution of modern graphic design through an in-depth survey of human visual communication throughout history. The course will begin with an investigation of the invention of writing and communication, trace through to the creation of the Gutenberg Press and culminate with the study of the modern, digital age. Discussion will focus on the function of Graphic Design to communicate and meet human need with an emphasis on the influence of technology and the evolving role of design in business. This course is designated as a Writing Intensive course within the Graphic Design curriculum according to Writing Intensive Course Guidelines.

*Prerequisite: ARTH-102*

**HIST-114 (Formerly L173)** **3-0-3**  
**American Transitions**

Students will become historians by asking questions about the changes wrought by the transformation of the United States from an agriculturally based, rural society to an urban, industrial and increasingly multi-cultural society in an interdependent world. This course will require students to read, write and speak about issues in the American past. This course may be used to satisfy a College Studies requirement, but not free elective credits.

**HIST-381 (Formerly H299)** **0-0-3**  
**Independent Study in History**

Students will complete an intensive research on a topic in history. This course can be taken for College Studies credit. For further details, see general description of Independent Study in "University Academic Policies and Procedures: Common Academic Policies for All Students."

Permission required, see appropriate form on the University Registrar's webpage <http://www.philau.edu/registrar/> for more information.

**HONOR-300 (Formerly U371)** **0-0-(3-12)**  
**Honors Study Abroad**

This non-credit option allows a student to earn honors credit while completing a semester in another country. Students interested in pursuing Honors Study Abroad work with their academic advisor and/or faculty to prepare a proposal to study/observe a facet of the host country's culture. Upon return to campus, students will offer a presentation of their observations to the campus community.

**HONOR-310** **0-0-0**  
**Honors Summer Readings**

This non-credit option is a very popular option. Exclusively on BlackBoard, students read, discuss and complete assignments of selected books under the guidance of a faculty member. The course counts toward one of the seven courses required for the honors certificate. To enroll, students must be in good standing in the Honors Program. This is a non-credit option.

**HONOR-355 (Formerly U361)** **0-0-0**

### **Honors Community Service**

Students interested in pursuing Honors Community Service work with the Honors director and/or campus community service coordinator to: 1) identify a local service effort, and 2) prepare a proposal to earn honors credit. This is a non-credit option.

**HONOR-381, HONOR-382** 0-0-3, 0-0-3

**(Formerly U381, U382)**

### **Honors Independent Study I and II**

Students interested in pursuing Honors Independent Study should meet with the faculty member with whom they want to study to prepare an outline of the topic, goals and objectives for the semester's work. Proposals should be turned in to the Honors director three weeks before pre-registration.

See general description of Independent Study in "University Academic Policies and Procedures: Common Academic Policies for All Students."

See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

*Prerequisites: junior/senior status and in good standing toward completing the Honors Program Scholar certificate.*

**HONOR-391, HONOR-392 (Formerly U391, U392)** 0-0-3, 0-0-3

### **Honors Research I and II**

Students interested in pursuing Honors Research should meet with the faculty member to plan a research project outlining the topic and inquiry. Proposals should be turned in to the Honors director three weeks before pre-registration.

*Prerequisites: junior/senior status and in good standing toward completing the Honors Program Scholar certificate.*

**HSCI-100 (Formerly PAS-100)** 1-0-1

### **Introduction to Health Professions**

This lecture and seminar course will familiarize the student with the concept, education, certification, legislation and roles of a variety of healthcare professions. The structure of the U.S. healthcare system, along with ethical and current controversial issues related to that system, will be discussed.

**HSCI-230 (Formerly PAS-230)** 1-1-2

### **Introduction to Healthcare**

This lecture and seminar course is designed to expose students in pre-health majors to the basic principles of human interaction in the clinical setting. Current issues in healthcare will also be discussed. This course includes 50 hours of required patient contact experience in a healthcare facility.

**HSCI-320 (Formerly PAS-320)** 0-6-3

### **Clinical Interactions**

This experiential, independent-study course includes an extended community-service volunteer experience (150 hours) in a healthcare setting. Students are required to complete and submit activity logs, a final paper and an evaluation from their supervisor.

**HSCI-330 (Formerly PAS-330)** 3-0-3

### **Medical Terminology**

This course is designed for students in undergraduate health science programs and focuses on the structure and use of medical language and common documentation formats. It also includes an introduction to medical informatics. Clinical cases are utilized to illustrate the use of medical terminology in the healthcare setting. This course provides a more in-depth examination of this subject than PAS-400.

**HUMN-215 (Formerly L383) 3-0-3**  
**Evil and Good**

A study of evil and good in art, literature, religion and philosophy, with attention to actual issues of evil and good in human social life. Concepts of evil and good in both Western and non-Western cultures will be surveyed. The course will also provide an introduction to strategies for ethical decision-making.

*Prerequisite: WRTG-101, HIST-11X*

**HUMN-223 (Formerly L382) 3-0-3**  
**World Philosophies**

This course takes a comparative approach to the study of philosophy, investigating the nature of philosophical activity in diverse cultures. The central question addressed in the course is: "Is the most reliable knowledge acquired through philosophical reasoning, scientific observation or religious devotion?"

*Prerequisite: WRTG-101, HIST-11X*

**HUMN-225 (Formerly LIT-225 and L381) 3-0-3**  
**Exploring World Literature**

In this course, students approach culture as reflected in the worlds created by individual writers in their works. The course emphasizes close reading, critical analysis and frequent writing about assigned readings. This course may be used to satisfy a College Studies requirement.

*Prerequisite: WRTG-101, HIST-11X*

**HUMN-381 (Formerly H399) 0-0-3**  
**Independent Study in the Humanities**

In this course, students will complete intensive research on a topic that does not fall within a particular discipline in the humanities or that is interdisciplinary in nature. The course can be taken for College Studies credit. For further details, see general description of Independent Study in "University Academic Policies and Procedures: Common Academic Policies for All Students."

Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

**HUMN-382 (Formerly L959) 0-0-3**  
**Independent Study in Languages**

See the statement on Independent Study in the "University Academic Policies and Procedures: Common Academic Policies for All Students."

Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.



**IENGR-315 (Formerly EN616) 3-0-3**  
**Operations Research II**

The course explores dynamic programming; decision theory involving one stage problem; probabilistic models of operations research; inventory theory; Markov chains; queuing theory and simulation.

*Prerequisites: ENGR-304, ENGR-307*

**IENGR-413 (Formerly EN711) 3-0-3**  
**Simulation Systems**

The course explores procedures and rationale for planning, designing and implementing computer simulation experiments used to analyze human-machine systems in engineering, business and social sciences.

*Prerequisite: IENGR-315*

**IENGR-414 (Formerly EN514) 3-0-3**

**Manufacturing Quality Control**

This course covers the methods used for statistical quality control, capability analysis, monitoring and improvement. Students will learn the techniques, as well as the software available (Minitab, Excel and SPSS) required to implement these techniques.

*Prerequisite: ENGR-305*

**IENGR-415 (Formerly EN617) 3-0-3**  
**Production Planning and Control**

This course covers several techniques that focus on efficient operations management within any organization. The topics include forecasting, inventory management, production systems – MRP, JIT, CONWIP - aggregated workforce planning, production scheduling and supply chain management. Even though the topics seem to be oriented to the manufacturing industry, the concepts taught in this course are applicable to any type of organization, including service, health care, manufacturing, financial and others.

*Prerequisite: ENGR 307, pre or co-requisite ENGR 498*

**IENGR-418 3-0-3**  
**Systems Engineering**

This course focuses on implementation of continuous process improvement within an organization. The purpose of the course is to provide the students with a comprehensive treatment of different tools employed successfully by industries for creating value while eliminating waste (non-value added activities). The course includes lean thinking, value stream mapping, cellular manufacturing, cycle time reduction, Kaisen training, Kanban production systems and Six Sigma.

*Prerequisite: IENGR-315, pre or co-requisite IENGR-413; pre or co-requisite ENGR-427; co-register with ENGR-498*

**IENGR-420 3-0-3**  
**Integrating Business and Engineering**

The course is designed to help students understand how business and engineering work together in an organization. This course will cover the fundamental concepts of financial reports, marketing, strategic

planning, and product life-cycle management. The focus of the course is to prepare the engineering students to make decisions related to technology, product and process development, in a way that combines technical, financial, marketing and strategic dimensions.

*Prerequisite: ENGR 303, IENGR 418*

**IENGR-426** **3-0-3**  
**Supply Chain Modeling and Analysis**

This course is a designated elective that can be selected as one of the two required designated electives for the BSISE. The course provides a broad introduction to many critical facets of supply chain. Students in this course will apply industrial engineering tools learned through the curriculum to design, analyze and optimize the supply chain such as, mathematical optimization, inventory management, transportation and network location, facilities planning and material handling. Then, more advanced topics are interrelated such as the value of information sharing in the supply chain, and customer value strategic alliances, international issues and decision support systems.

*Prerequisites: IENGR-413, IENGR-415*

**IENGR-427 (Formerly EN717)** **3-0-3**  
**Facility Planning & Material Handling**

Physical organization of work places and departments to optimize objectives such as material movement, safety and worker satisfaction. Review of ISE methods for work-place design and productivity measurement and economic decision-making. Computer solutions for layout problems and mathematical models for location problems. Analysis and design of material handling, warehousing and distribution systems.

*Prerequisites: ENGR-307; pre or co-requisite ENGR-498*

**INDD-101 (Formerly I111)** **0-8-4**  
**Design I for Industrial Design**

This studio is an introduction to design for undergraduate majors in industrial design. The course will provide an intensive introduction to design as an iterative problem-solving process. It will also introduce strategies for making and analyzing form, and present basic techniques of two-dimensional visualization and documentation of three-dimensional objects and principles of design critique, testing and research.

**INDD-102 (Formerly I112)** **0-8-4**  
**Design II for Industrial Design**

This studio introduces methods, materials and vocabulary of the industrial design profession, as well as design as a rational, iterative process of problem solving based on working creatively within constraints. Working with materials, digital and hand tools, shop processes and presentation techniques used by professionals are emphasized. It is intensive in industrial design drawing, including sketches, development drawings, orthographic, axonometric and perspective renderings, as well as beginning drafting as used in industrial design, with dimensioned assembly and parts drawings.

*Prerequisite: grade of "C" or better in INDD-101 or ADFND-101 or permission of the director of the Industrial Design program.*

**INDD-106 (Formerly I321)** **2-4-3**  
**Materials and Process: Fabrication**

This course introduces shop techniques as they pertain to industrial design model-making and prototype construction. All industrial design students must take this course for shop equipment safety training and

pass a safety test. Throughout the semester, attention is given to safety precautions for the shop, along with demonstrations of shop equipment and fabrication processes. A major portion of the course will consist of developing an understanding of the materials and machinery commonly used by industrial designers for producing both working and appearance models.

**INDD-201 (Formerly I311) 0-8-4**  
**Design III for Industrial Design**

This course focuses on creative problem-solving techniques using drawing, sketch modeling and basic shop skills. Students are exposed to a wide choice of materials, which industrial designers use to move their projects forward. Students will use several media for the purpose of documenting projects in progress, for duplication and for presentation purposes. Emphasis is placed on the improvement of craft in the execution of projects.

*Prerequisite: grade of "C" or better in INDD-102*

**INDD-202 (Formerly I312) 0-8-4**  
**Design IV for Industrial Design**

During the fourth in a series of eight studios, designs are conceived that explore the dynamics between objects and the user's senses and emotions. Students are challenged to improve their ability to define problems, generate concepts, evaluate these and offer refinements of solutions. Students will use basic imaging techniques in the presentation of design solutions.

*Prerequisite: grade of "C" or better in INDD-201*

**INDD-205 (Formerly I351) 1-4-3**  
**Rendering for Industrial Design**

An introduction to the traditional techniques and materials that industrial designers use to develop and represent three-dimensional concepts and ideas. Students become proficient in the use of pencils, markers, pastels and airbrush on a variety of media. Emphasis is placed on understanding the significance of color and graphic applications for industrial design.

*Prerequisite: DRAW-201 or permission of the instructor*

**INDD-207 (Formerly I322) 2-4-3**  
**Materials and Processes: Manufacturing**

This course is concerned with the exploration of materials used in the mass production of products, the processes used to shape these materials and the applicability of these materials to product-design solutions. Students should be prepared to visit a number of manufacturing facilities. A survey of rapid prototyping technologies completes the course.

*Prerequisite: grade of "C" or better in INDD-102 or ENGR-102*

**INDD-210 (Formerly I332) 2-2-3**  
**Ergonomic Studies**

This course analyzes human factors as related to broad aspects of design development. It explores the issues of operator/user human factors and their impact on design. The outcome of this course will be to ascertain the relationship of basic human dimensions on product design. Subjects include systems reliability, sensory and motor processes, basic research techniques and anthropometric studies.

*Prerequisite: INDD-106 or permission of the instructor*

**INDD-301 (Formerly I511)**  
**Design V for Industrial Design**

**0-8-4**

The fifth in a series of eight studios, this course focuses on ideas of designs derived from an understanding of consumer behavior. Emphasis is placed on user needs, ease of use and product culture, without ignoring the practicalities imposed by manufacturer's markets, manufacturing process constraints and investment concerns. Students will demonstrate control of the process of design to develop meaningful concepts that employ appropriate technology for their eventual realization.

*Prerequisite: grade of "C" or better in INDD-202*

**INDD-302 (Formerly I512)**  
**Design VI for Industrial Design**

**0-12-6**

In this sixth of a series of eight studio courses, students design and develop consumer products. Students learn about the complexities of the product-development process, during which assembly requirements, marketing issues, materials and component development all affect the initial intent of their designs. Students are required to fabricate a fully functional prototype of their designs. A selected team of professionals from the industry will evaluate the final product.

*Prerequisite: grade of "C" or better in INDD-301*

**INDD-304 (Formerly I532)**  
**Design History/Theory**

**3-1-3**

This writing intensive seminar will serve as a forum for students to explore the context and scope of the practice of industrial design through readings, research, critical discussions, written presentations and papers. This course is intensive and incorporates a workshop component in which students will use various theoretical frameworks to examine their own attitudes and design work through papers and spoken/graphic presentations.

*Prerequisite: INDD-324 or permission of instructor*

**INDD-306A**

**Intercultural Innovation: Study Abroad Component 6-36-1**

During a short experience in a foreign country, students will observe and document cultural and demographic differences between countries through formal lectures, and field observation and team exercises. The work in this class is informed by the use of user-based observational research techniques. Documentation from this phase is brought back to the US for use in the INDD 306B Intercultural Innovation: Interdisciplinary Project Component class. Students should plan on taking BOTH classes.

**INDD-306B**

**Intercultural Innovation: Interdisciplinary Project Component 0-2-2**

This is the second in a two-course sequence. This class builds on work done in the INDD 306A Intercultural Innovation: Study Abroad Component course. Students should plan on taking BOTH classes. In INDD 306B, students bring research by interdisciplinary teams outside the US into well-documented opportunities for new products, business platforms or systems. In a series of team meetings and design critiques, they then turn them into cohesive proposals including both design and business elements.

**INDD-324 (Formerly I531) 3-0-3**  
**History of Design and Communication**

This lecture course begins with industrialization and leads to the development of modern design and philosophy. Aspects of industrial design and graphic communication will be critically reviewed. Current design events will be studied interactively and discussed as a continuation of past design inquiries.

**INDD-381 (Formerly I891) 0-0-3**  
**Independent Study in Industrial Design**

For further details, see general description of Independent Study in “University Academic Policies and Procedures: Common Academic Policies for All Students.”

*Prerequisites: INDD-302 and permission of the instructor. See appropriate form on the University Registrar’s webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

**INDD-401 (Formerly I711) 0-12-6**  
**Design VII for Industrial Design**

The seventh in a sequence of eight studios, this course focuses on the development and expression of design ideas through the knowledgeable assembly of electronic systems and components. The purpose of this course is to familiarize students with technology as it applies to the practice of industrial design. It will focus on technology in three areas: expansion of human ability, augmentation and articulation in industry, and creativity and development enhancement.

*Prerequisite: grade of “C” or better in INDD-302*

**INDD-402 (Formerly I712) 0-12-6**  
**Design VIII for Industrial Design**

The last in a sequence of eight studio courses, this course is entirely dedicated to the student’s capstone project. It is structured to simulate all aspects of client/designer dynamics, research requirements and project-management issues. Students secure a sponsor from industry or from the industrial design profession, choose the topic of the thesis and present the outcome of their project in a public forum.

*Prerequisites: grade of “C” or better in INDD-401 and concurrent enrollment in INDD-494*

**INDD-493 (Formerly I851) 2-2-3**  
**Professional Practice I**

The first in a two-course sequence will address the business, legal and ethical issues in the practice of industrial design. It addresses vital business imperatives in the field of industrial design and such issues impacting on independent consultant design practice and corporate design staff activities. Through research, students begin a personal exploration of the different disciplines embraced by the profession. Students begin networking with the profession to secure and negotiate commitments for their capstone project. This course is writing intensive.

*Prerequisites: grade of “C” or better in INDD-302*

**INDD-494 (Formerly I862) 2-2-3**  
**Professional Practice II**

The second in a two-course sequence begins with management concerns related directly to the capstone project. Assignments serve to research project design solutions. The second half of the course focuses on presentation preparations for the capstone project, the integration of the project into the

portfolio and the development of this portfolio in digital media. Students are exposed to various issues related to finding gainful employment.

*Prerequisites: grade of "C" or better in INDD-401, INDD-493 and concurrent enrollment in INDD-402*

**INFO-101 (Formerly B122) 2-2-3**  
**Introduction to Information Systems**

The course provides an introduction to the principles of business information processing and the structure and operation of modern digital computers and networks. Included are practical applications and hands-on experience with a word processor, spreadsheets, database, presentation software and World Wide Web authoring software.

**INTD-102 0-8-4**  
**Design 2: Interior Design**

This interior design foundation studio is a synthesis of fundamental design principles and an introduction to research as a tool for understanding programming and design. Lectures and demonstrations will utilize the case-study methodology to investigate various design strategies and to chart the historical course of modernism within the context of residential design. This first interior design studio introduces students to methodologies, processes, color theory, and design elements relevant to interior design.

*Prerequisite: grade of "C" or better in ADFND-101*

**INTD-106 (Formerly A123) 1-4-3**  
**Technical Drawing and Graphic Representation**

Following one semester of drawing, this course focuses on the fundamentals of creative graphic representation. Specific topics of emphasis include surveying building interiors, the construction of orthographic and paraline projections including floor plans, elevations, sections and one-point and two-point perspectives.

*Prerequisite: DRAW-101 and ADFND-101*

**INTD-201 (Formerly A315) 0-8-4**  
**Design 3 for Interior Design**

This studio examines the elements, principles and theories of interior design within the framework of residential and hospitality design. Students will explore and synthesize conceptual, theoretical, functional, and aesthetic issues. Additional foci include the organization and interrelationship of multi-level interior spaces, elements of enclosure, human behavior issues, symbolism and socio-cultural factors. The craft of making and the role of color, materials, furniture, fixtures and equipment in defining spaces and environmental experience will be emphasized.

*Prerequisite: INTD-106 and grade of "C" or better in INTD-102*

**INTD-202 (Formerly A316) 0-8-4**  
**Design 4 for Interior Design**

Through diverse design projects, this studio introduces students to the conceptual, theoretical, functional and aesthetic issues related to civic/educational and commercial interiors for contrasting populations. The integration of intuitive and structured design processes will be emphasized. The development of spaces, selection of furniture, fixtures, equipment and materials will be made in relation to performance and experiential requirements. This course incorporates collaboration, research, writing,

and analysis to explore human behavior and needs in the built environment.

*Prerequisite: grade "C" or better in INTD-201*

**INTD-206 (Formerly A346) 2-2-3**  
**Interior Building Technology**

This course focuses on construction and installation as it specifically relates to interior design. Students will be introduced to the nature and characteristics of interior detailing in relation to interior construction such as architectural woodwork, millwork, partitions, floors, ceilings, stairs, custom cabinetry, furniture and specialty elements. The influence of interior finish materials and textiles on interior form and detailing will be explored. Additional foci include environmental factors, building codes, accessibility requirements, fire safety and materials regulations.

*Prerequisite: ARCHDSN-210 and INTD-201*

**INTD-208 (Formerly A601) 2-2-3**  
**Presentation Techniques**

This elective course explores several types of rendering techniques for interior design and architectural spaces. It consists of discussion, demonstration and experimentation with freehand and constructed perspectives, various drawing and rendering media, basic digital rendering techniques and various presentation methods.

*Prerequisite: INTD-201*

**INTD-210 (Formerly A351) 1-4-3**  
**Color: Theory and Practice**

This elective studio explores the phenomena and meaning of color, based on appropriate theories of the physical aspects of color using pigment, light and space. Exercises examine what color is, why it is and how we see it. Additional foci include control of color interactions and distinguishing color differences. This course will provide the basis for color choices in a logical and sequential manner and will bridge the gap between theory and use.

*Prerequisite: DSGNFND-203 or grade of "C" or better in ADFND-102 or grade "C" or better in INTD-102*

**INTD-301 (Formerly A515) 0-12-6**  
**Design 5 for Interior Design**

This interior design studio challenges students with increased complexity of three-dimensional interior space, program, concept, and design process in the context of community oriented commercial/retail design. Students will translate their design thinking into comprehensive solutions that address place making, branding, construction technology, materiality, lighting design, human factors, furniture selection/planning, building codes and standards. This studio incorporates collaboration to enhance understanding of teamwork in design practice.

*Prerequisite: grade of "C" or better in INTD-202*

**INTD-302 (Formerly A516) 0-12-6**  
**Design 6 for Interior Design**

This studio concentrates on contemporary issues relating to business/office typologies, building technology, and sustainable design. Design and technological issues are addressed through: an understanding of office culture, form making, construction systems, solar considerations, indoor

environmental quality, HVAC systems, space planning, material and finish selection, lighting design, and integration of systems furniture and equipment. Solutions emphasize holistic and sustainable design thinking, organization of complex spatial responses, and the understanding that design is inherently constructive in nature.

*Prerequisites: grade of "C" or better in INTD-301*

**INTD-304** **0-1-5**  
**Integrated Community Service**

This integrated community service course is required in the Interior Design major. It is an opportunity for students to use and apply their acquired knowledge in a "real world" setting and to work in integrated and collaborative teams. Students will experience the reciprocal nature and responsibility of community service work as fully participating citizens within the greater Philadelphia region.

*Prerequisite: grade of "C" or better in INTD-202, or permission of the instructor.*

**INTD-305 (Formerly A745)** **2-2-3**  
**Interior Building Systems**

This course will focus on the understanding and application of a broad range of mechanical, electrical, lighting, acoustical, plumbing, HVAC, security and other building systems in the context of interior design. Students will be introduced to the nature and characteristics of fire detection, protection and suppression in building interiors. The critical role of interior building systems in establishing and maintaining the health, safety and welfare of users will be emphasized.

*Prerequisites: INTD-206 and INTD-202*

**INTD-306** **1-4-3**  
**Advanced Visualization: Interiors**

This course teaches advanced digital three-dimensional modeling, rendering, and animation techniques with a focus on interior environments. Emphasis is placed on accurate and realistic representation of interior spaces, forms, materials, furniture, color and lighting effects, and the creation of virtual walkthroughs. These professional level skills enhance design representations and presentations. Students complete a series of exercises and projects covering a series of advanced digital techniques.

*Prerequisites: ARCHDSN-208 Vis I: Digital Modeling, and a grade of "C" or better in INTD-202: Design IV: Interior Design-delete or permission of the program director*

**INTD-308 (Formerly A625)** **1-4-3**  
**CAD 2 for Interior Design**

Following Visualization 1: Digital Modeling, the introductory computer-aided design course, CAD 2 for Interior Design further develops students' design communication and documentation skills utilizing AutoCAD and BIM software. Students will have the opportunity to produce interior design working drawings and advance their knowledge of professional interior design construction and specification documents.

*Prerequisite: ARCHDSN-208, INTD-206, INTD-202*



**INTD-310 (Formerly A526) 3-0-3**  
**Textiles and Materials for Interiors and Architecture**

This course introduces the role of textiles in the creation of commercial and residential interiors. Key topics include the selection, specification and application of textiles based on their properties and performance criteria; sources of textiles and fabrics; the concept of sustainable resources; appropriate installation methods and maintenance requirements of textiles in interior applications; codes; regulations and standards related to use of textiles in interiors; and estimating material requirements such as carpeting, wallpaper and ceiling finishes.

*Prerequisite: INTD-201 or permission of the instructor*

**INTD-311 (Formerly A616) 2-2-3**  
**Introduction to Set Design**

This elective focuses on developing the setting for the action of a play. The set designer develops many of the same skills exercised by architects/interior designers: mastery of design fundamentals, understanding of time and place, knowledge of construction techniques and awareness of how people use space. Steps to creating the stage set will include: careful reading and discussion of selected plays, surveying an existing stage, assisting in the construction of a stage set and attending assigned performances.

*Prerequisites: grade of "C" or better in both ARCH-311 and ARCH-312 or LARCH-302, or grade of "C" or better in INTD-302*

**INTD-325 (Formerly A615) 2-2-3**  
**Furniture Design**

This beginning-level elective course is intended to provide students with a basic knowledge of the aspects involved in furniture design. The goal is to expose students to the various means through which one engages in product design. Emphasis is on the fabrication process in addition to prototyping, testing and revision. The course consists of readings, brief lectures, class discussions and studio projects that cover the range of information that designers need to know to be able to specify, design and evaluate furniture-related products for the built environment. A significant amount of class time will be devoted to the development, design and revision of projects.

*Prerequisite: grade "C" or better in ARCH-201, INDD-201, LARCH-201 or INTD-201*

**INTD-401 (Formerly A715) 0-12-6**  
**Design 7 for Interior Design**

This advanced comprehensive studio emphasizes the resolution of design issues in a semester-long specialized project. It spans from schematic design through design development and construction documentation and builds upon the knowledge acquired in all previous design, history/theory, and technical courses. Students synthesize their research and design ideation and apply their knowledge of typology, program, function, form making, planning, human behavior, construction, materials, building systems, acoustics, lighting, FF&E, codes and standards in a comprehensive final presentation.

*Prerequisite: grade of "C" or better in INTD-302*

**INTD-412 (Formerly A753) 2-1-2**  
**Interior Professional Practice and Contract Design**

In this seminar, the interior design student will analyze the specialized services performed by the professional designer by studying the administrative, legal, ethical and financial aspects of professional practice. Contract documents, specifications, safety standards and building codes will be studied within the context of a non-residential (contract) design project.

*Prerequisite: INTD-206 and grade of "C" or better in INTD-302*

**INTD-487 (Formerly A717) 1-4-3**  
**Capstone Research and Programming for Interior Design**

This course gives students the opportunity to assess their inclinations in the field and to select a project that addresses their specific interest. Students are expected to generate individualized research and programming to be used for design and development in their Capstone Project the following semester. They will produce a Capstone Research & Programming Document, which will be the result of research, analysis, and the synthesis of information. It will articulate a clear definition of project parameters and programming. The process of generating this document will recapitulate and augment the research and programming process, which students have been exposed to in previous interior design studios.

*Prerequisites: grade of "C" or better in INTD-302*

**INTD-488 (Formerly A718) 0-12-6**  
**Capstone Project for Interior Design**

The interior design Capstone semester provides students with an opportunity to focus on an area of concentration in a design project, which will be independently developed with a designated faculty member. The student must demonstrate aptitude and understanding of architectural and interior design theory, principles, and technology, as well as, overall design competence. The Capstone project includes research in the student's selected problem area, development of the design concept, detailing and creative presentation of the design investigation.

*Prerequisite: grade of "C" or better in INTD-401 and INTD-487*

**INTRN 493 .05-6**  
**Internship**

Academic internships at Philadelphia University aid students in professional preparation through a work experience directly related to their major and career goals. Three credit registration options exist in 0.5 credit, 3 credit and 6 credit increments. All are completed as elective academic courses, including a course syllabus focused on professional skill-building and written assignments. While the primary emphasis on the course is on the internship work experience, course assignments are incorporated to prompt reflection on the internship. This reflection is an integral component of experiential learning and students' overall career and professional development.

The Career Services Center and designated Faculty Internship Advisor (FIA) from the student's major provide support and guidance during the semester of participation. Career Services staff is also available to assist students with internship search strategy prior to the internship. At the conclusion of the internship semester, all students are evaluated both by their employer and FIA, receiving a grade derived from successful performance as determined by the employer, the quality of academic assignments submitted to faculty, and completion of minimum required hours. All internships, regardless of credit registration, are a minimum of twelve weeks in length.

Academic internships are offered during the fall, spring and twelve week summer terms. The deadline to register for academic internships is the last day to add classes for the semester of intended participation, as established by the Registrar's Office (refer to the academic calendar for specific deadlines). Students are strongly encouraged to apply early and contact Career Services for assistance, providing the best success in finding an appropriate experience in time to meet registration deadlines.

To learn more about academic internships at Philadelphia University, visit [www.philau.edu/career](http://www.philau.edu/career) or contact Career Services.

**Minimum requirements for participation:**

Undergraduate:

- Students must maintain full-time status during the regular academic year
- Completion of 60 credits by the start of the internship experience (90 credits for Architecture and Landscape Architecture majors)
- 2.5 cumulative GPA in the semester preceding the internship and in good academic standing at the university. Students on academic probation are ineligible.
- If a transfer student, at least 15 credits earned at PhilaU

International:

- Meet criteria above as relevant
- Determine if eligible for Curricular Practical Training (CPT) by contacting the office for International Student Programs

Note: Students not meeting minimum requirements may be considered by submitting a formal appeal and should contact Career Services for further instructions.

**ITAL-101 (Formerly L346)                      3-0-3**

**Italian I**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**ITAL-201 (Formerly L646)                      3-0-3**

**Italian II**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**ITAL-301 (Formerly L746) 3-0-3**

**Italian III**

A beginner's course designed for students who have completed two semesters of college-level language or the equivalent. The focus is on advancing oral expression, listening comprehension and the development of reading and writing skills, so that students can gain confidence and express themselves fluidly entirely in the target language. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: grade of "C" or better in -201 or a minimum of three years of prior high school foreign language study or permission of the instructor.*

**ITAL-401 3-0-3**

**Italian IV**

An intermediate course that provides students with the opportunity to communicate in a fluent and sophisticated manner. The focus is on expanding the knowledge of structures and vocabulary that students have acquired in levels I-III. In addition to constant attention to speaking, writing, listening and reading, more complex ways of expression are also emphasized. Contemporary culture is explored through authentic visual media and written materials.

*Prerequisite: Grade of "C" or better in -301 or a minimum of four years of high school language study or permission of the instructor.*

**JAPN-101 (Formerly L341) 3-0-3**

**Japanese I**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**JAPN-201 (Formerly L641) 3-0-3**

**Japanese II**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**JAPN-301 (Formerly L741) 3-0-3**

**Japanese III**

A beginner's course designed for students who have completed two semesters of college-level language or the equivalent. The focus is on advancing oral expression, listening comprehension and the development of reading and writing skills, so that students can gain confidence and express themselves fluidly entirely in the target language. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: grade of "C" or better in -201 or a minimum of three years of prior high school foreign language study or permission of the instructor.*

**JAPN-401 (Formerly L841) 3-0-3**

**Japanese IV**

An intermediate course that provides students with the opportunity to communicate in a fluent and sophisticated manner. The focus is on expanding the knowledge of structures and vocabulary that students have acquired in levels I-III. In addition to constant attention to speaking, writing, listening and reading, more complex ways of expression are also emphasized. Contemporary culture is explored through authentic visual media and written materials.

*Prerequisite: Grade of "C" or better in -301 or a minimum of four years of high school language study or permission of the instructor.*

**JSINT-3XX 3-0-3**

**Integrative Professional Seminars**  
*(writing intensive)*

Integrative Professional Seminars offer an in-depth examination of specific topics or themes related to the University's professional majors. Geared for a general audience, these courses allow students to explore topics from a variety of perspectives, including those from the disciplines of history, the social sciences and/or the humanities. As advanced writing-intensive courses within the College Studies program, these courses prepare students for senior capstone courses in College Studies and the majors by developing their research, communication and critical-thinking skills. To view current course offerings in this category, go to [www.PhilaU.edu/JuniorSeminars](http://www.PhilaU.edu/JuniorSeminars).

*Prerequisite: WRTG-2XX, SOC-2XX*

**JSINT-360 (was LARCH-306) 3-0-3**

**Human Behavior and the Physical Environment**

This course provides an introduction to a range of viewpoints, concepts, and characteristics of human behavior that should be considered during the design process. Cultural, social, and psychological factors are examined, e.g., relationships to water, responses to open and enclosed spaces, roles of textures and



**JSLA-360 (Formerly JSLA-350) 3-0-3**  
**Creative Writing: Shaping Narrative and Experience**  
*(writing intensive)*

In this hands-on course, students develop their knowledge of how to shape narrative and experience through forms of creative written expression such as poetry and fiction. Students will read and analyze work in these forms; experiment with these forms through writing their own creative drafts and revisions; and develop critiquing skills in a workshop environment. Students showcase their work in a final portfolio and a reading open to the University community.

*Prerequisite: WRTG-2XX, SOC-2XX*

**JSLA-361 (Formerly LIT-320, L686) 3-0-3**  
**From Fiction to Film**  
*(writing intensive)*

The study of the interrelationships between literature and film through case studies of the translation of significant novels (focus on 19th and 20th century) into works of cinema.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-362 (Formerly LIT-311, L683) 3-0-3**  
**The Artist and Society in Literature and Film**  
*(writing intensive)*

An examination of the enigmatic figure of the artist depicted in literature (the short story, the novella and the novel). The genesis and complexity of artists as literary figures will be considered as they find themselves in conflict with society.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-363 (Formerly LIT-315, L685) 3-0-3**  
**Shakespeare and Popular Culture**  
*(writing intensive)*

What role does Shakespeare's writing play in popular culture today? How and why have modern filmmakers, artists and writers "reinterpreted" Shakespeare's plays? Students read and discuss selected plays and examine various film adaptations of them. In addition to comparing different interpretations of Shakespeare's plays to the originals, the course investigates some of the larger issues surrounding Shakespeare and contemporary culture.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-370 (Formerly HIST-229, L675) 3-0-3**  
**The U.S.: The Recent Past**  
*(writing intensive)*

This course focuses on social, cultural, political and economic changes within the United States since 1945. Topics such as beatniks and hippies, the New Left, the civil rights movement, student and anti-war movements, the women's movement, the politics of conservatism and the fate of labor will be studied

in the context of an increasingly ethnically and racially diverse society. Students will be encouraged to explore and write from a wide range of sources from across the disciplines.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-380 (Formerly SOC-312, L664) 3-0-3**

**Human Rights**

*(writing intensive)*

The course will examine the question of whether there are certain rights that we all possess as human beings and the prominence of these rights in international relations. Students will monitor human-rights violations in the United States and other countries in order to determine how much we have achieved as a world community and how far we have yet to go.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-381 (Formerly SOC-325, L684) 3-0-3**

**Gender Studies**

*(writing intensive)*

This course focuses on recent developments in gender studies, examining how gender has been conceptualized and analyzed, historically and in the present day. Topics considered include the formation of masculinities and femininities, the intersections between gender, sexual orientation, class and race, and the significance of gender in personal and professional contexts. Readings are drawn from a variety of disciplines depending on the instructor.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-390 (Formerly SOC-321, L673) 3-0-3**

**The Urban Experience**

*(writing intensive)*

This course discusses the origins and development of urban life. Special focus will be upon Philadelphia as it represents trends in the American experience of cities.

*Prerequisites: WRTG-2XX, SOC-2XX*

**JSLA-391 (Formerly SOC-315, L671) 3-0-3**

**The African American Experience**

*(writing intensive)*

This course explores African Americans' struggle for freedom and equality in American society. It examines the social, economic, political and cultural realms of African American life with some exploration of cultural origins in West Africa. Students read in primary sources and use literary evidence in an interdisciplinary effort to understand the past and explore contemporary issues in American society.

*Prerequisites: WRTG-2XX, SOC-2XX*

**KNIT-201 (Formerly T551) 4-2-4**

**Knit Technology I**

Students will study both weft- and warp-knit fabrics through an investigation of knit construction, machinery, principles and knit fabric analysis. Lectures are complemented with a series of lab exercises on hand-flat equipment and fabric-analysis projects designed to fully acquaint the student with the principles of knit-fabric design and production.



*Prerequisite: TEXT-101 or TEXT-104 and Admission to the Textile Design (TEXD.BS.DAY) or Textile Materials Technology (TMT.BS.DAY) Programs or by permission of program director.*

**KNIT-203 (Formerly T540) 1-5-3**  
**Knit Design Studio I**

Students will learn through individual development how to create a range of texture and color effects within knit design. Independent needle selection and the use of the presser foot will be explored within design areas involving Jacquard, held-stitch and tuck-stitch structures. Design ideas will be developed through to swatch/sketch proposals suitable for sweater production.

*Prerequisite: KNIT-201 and VSDES-101*

**KNIT-205 (Formerly T552) 4-2-4**  
**Knit Technology II**

A further investigation into the construction, design and production of both weft- and warp-knit fabrics. Lectures will be complemented with lab work involving the design, production and analysis of knit fabrics upon power-knitting equipment.

*Prerequisite: KNIT-201*

**KNIT-213 (Formerly T541) 1-5-3**  
**Knit Design Studio II**

A knit design studio elective for Textile or Fashion majors specializing in the knit-design area. Original design ideas will be developed through swatch/sketch presentations. Garment ideas will be developed through technical sketches and specifications into completed sweaters.

*Prerequisite: A grade of "C" or better in KNIT-203*

**KNIT-307 (Formerly T553) 3-3-4**  
**Advanced Warp Knitting**

Covers all facets of warp-knitting technology with particular emphasis on the variety of machines and fabric construction in relation to end-use applications and markets. Tricot and raschel warp-knit fabric constructions are made in the knitting laboratory to illustrate the basic warp-knit stitches and lapping motions. A variety of warp-knit fabric samples are analyzed to illustrate basic fabric geometric parameters used in the design and production of warp-knit constructions. Also, students are required to research a unique warp-knit process/product.

*Prerequisite: KNIT-201*

**KNIT-326 (Formerly T503) 1-5-3**  
**Advanced Weft Knitting**

An exploration of the principles involved in knit design using CAD systems and electronic-knitting equipment. Students will design, write computer programs and knit their own fabrics on sweater- and jersey-knitting equipment. Fabric constructions such as Jacquard, links-links, cables, pointelle and presser-foot designs will be developed.

*Prerequisite: KNIT-203 or permission of the instructor*

**KNIT-401 (Formerly T545) 1-5-3**  
**Introduction to Knit Design**

(for non-Textile Design majors)

An elective course in which students may explore the development of knit design. Design ideas will be developed on hand equipment through to swatch/sketch proposals suitable for product design. Students can take this course as a single elective and develop design work suitable for inclusion in their portfolio or take further knit-design electives in order to further their skills.

*Cannot be taken as a replacement for KNIT-201.*

**LARCH-102 (Formerly ADFND-102 for LA Students) 0-8-4**  
**LA Design 2: Landscape Architecture Foundation**

This foundation design studio is a synthesis of fundamentals of landscape architecture design principles, introduction to programmatic research and an in-depth study of design process, methodologies and craft. All explorations use the landscape as the subject of the studio. Form, texture and spatial organization are emphasized along with social, psychological and spiritual experiences of place.

*Prerequisites: ADFND-101, DRAW-101*

**LARCH-105 (Formerly ECBIO-301 for LA Students) 2-2-3**  
**Landscape Ecology**

Landscape Ecology combines the spatial approach of the landscape architect with the functional approach of the ecologist. As a field it is an integrative and multidisciplinary science that combines geology, botany, zoology and human settlements at the landscape scale. For this course the focus will be on heterogeneous land mosaics, such as neighborhoods, urban areas, whole landscapes, and regions. Students learn the key principles of landscape ecology and then apply them to landscape conservation and the planning and design processes.

*Prerequisite: None*

**LARCH-201 (Formerly LARCH-202) 0-8-4**  
**LA Design 3: Site Design**

The focus of this studio is sustainable large-scale planning and design. Students explore land-planning theories, methods and resources used in landscape analyses for sustainable settlement, preservation or management of the land. Natural, cultural and experiential data are integrated into the decision-making and design processes.

*Prerequisite: grade of "C" or better in LARCH-102*

**LARCH-203 (Formerly LA122) 1-4-3**  
**Graphics for Landscape Architecture**

In this course, the student gains proficiency in various landscape architecture graphic conventions used in generating, evaluating and presenting design ideas. Included are principles and application of graphic language, color theory, diagramming, plan and section graphics, and oblique and perspective drawings.

*Prerequisite: DRAW-101 or permission of the director*

**LARCH-204 0-8-4**  
**LA Design 4: Regional Landscape Planning**

Regional Landscape Planning builds on elements, principles and theories explored in LARCH-102 and LARCH-201, but at the regional scale. Sustainable regional land planning theories, methods and resources used in larger scale landscape analyses for settlement, preservation or management of the land are explored. Natural, cultural and experimental data are integrated into the decision-making and design processes.

*Prerequisites: grade of "C" or better in LARCH-201 and LARCH-207*

**LARCH-206 (Formerly LA332)**

**3-0-3**

**History of Landscape Architecture 1**

This survey course covers significant examples of landscapes and landscape design from the eastern, central Asian, and western regions of the world, produced from ancient times through the 19th centuries. Students will be introduced to the cultural and social history of each epoch as a means of critically analyzing key historical works of landscape design and addressing the ideas and concepts imbedded in the term landscape. *Prerequisite: WRTG-101.* (Meets Arts & Culture Requirement)

**LARCH-207 (Formerly LA341)** **2-2-3**  
**LA Tech: Grading**

This course focuses on the principles and techniques of landform manipulation for design and drainage. Students develop an understanding of contours, contour manipulation and site-construction methodologies. Topics include topographic and grading problems in landscape engineering: drainage plans, grading plans, spot elevations, road alignment, sections and profiles, and cut-and-fill calculations.

*Prerequisite: LARCH-102 or ADFND-102 or permission of the director*

**LARCH-300** **0-12-6**  
**LA Design 4: Urban Design I**

This design studio focuses on urban design at the site scale. It reinforces design principles learned in earlier semesters, while introducing students to increasing complexity in both program and the design process. The primary philosophic underpinning of the studio is design within a sustainable urban context.

*Prerequisite: grade of "C" or better in LARCH-201*

**LARCH-302** **0-12-6**  
**LA Design 5: Community Design**

This studio focuses on community design with the physical environment viewed as a catalyst for community enhancement and revitalization. Issues include community identification, social cohesiveness, social, economic and political factors, the role of open space in urban neighborhoods and community safety and livability. Emphasis is placed on learning methods and techniques for developing physical-design solutions and implementation strategies when working with school, neighborhood and community groups. An important component of the experience is community participation.

*Prerequisite: grade of "C" or better in LARCH-301*

**LARCH-303** **2-2-3**  
**LA Tech: Advanced Grading**

This Advanced Grading course augments what the students have learned in their first grading course, plus covers in more depth other sustainable aspects of landform manipulation for design and stormwater management. Computer applications will be used as a learning tool. Field trips to sites that are particularly appropriate for observing, measuring and experiencing the sculptural qualities and capabilities of landform are also an integral component of this course.

*Prerequisite: LARCH-207*

**LARCH-305** **2-2-3**  
**Plant Community Ecology**

This course investigates how interactions within plant species, between species and between species and their environment influences plant community structure. Questions explored include: How many species are in a given habitat type? Why these species and not others? How do they interact with each other plants? What controls their abundances in natural and urban landscapes? Students will learn how plant distributions are influenced by environmental conditions with a particular emphasis on the urban environs. In-the-field exercises constitute a significant portion of this course.

*Prerequisites: LARCH-105 and ECBIO-208*

**LARCH-307 (Formerly LA532) 3-0-3**  
**History of Landscape Architecture 2**

This course is the third of a four-term sequence of history/theory courses. It surveys key examples of landscape architecture from the mid-19th century to the present time. Students strengthen their vocabulary for analyzing and evaluating the designed landscape. Students are also introduced to the influential personalities, projects, events, concepts and thoughts that were pivotal in the philosophical and ethical development of the profession of landscape architecture.

*Prerequisite: LARCH-206*

**LARCH-310 (Formerly LA521) 1-4-3**  
**GIS for Landscape Analysis**

Students are introduced to Geographic Information Systems (GIS) applications appropriate to landscape analysis. GIS is an increasingly important software tool for organizing digital spatial data in an accessible and logical manner for site design, recreation master planning, visual analysis, comprehensive planning, resource management and public advocacy.

*Prerequisite: LARCH-201 or ECBIO-301*

**LARCH-312 (Formerly ECBIO-409 for LA Students) 2-2-3**  
**Sustainable Planting Design**

In this course students apply the ecological needs of plants to real situations such as greenroofs, xeriscaping, habitat management, brownfield restorations, meadows and highway plantings. The course stresses ecological relationships among plants and how those relationships are used in the design of these environments. In order to design and maintain these environments students need to understand planting design as well as ecology.

*Prerequisites: ECBIO-208 or LARCH-305*

**LARCH-401 (Formerly LA711) 0-12-6**  
**LA Design 7: Interdisciplinary Design**

Design VII is an interdisciplinary studio for landscape architecture and other design students who will work in interdisciplinary teams.

Specific studio topics may include brownfield redevelopment, co-housing development, waterfront redevelopment and community revitalization.

*Prerequisites: grade of "C" or better in LARCH-301 or ARCH-311 or permission of the director*

**LARCH-402 0-12-6**  
**LA Design 6: Restoration Management**

This studio course focuses on restoration management methodologies and ecological landscape design principles as they apply to a damaged urban landscape. Students explore sustainable restoration methodologies, how to determine values and make choices, while being cognizant of the costs and public perception. Techniques, practices and materials both sustainable and conventional are evaluated as part of the planning and design processes.

*Prerequisites: grade of "C" or better in LARCH-301*

**LARCH-409 (Formerly LA741) 2-2-3**

### **LA Tech: Materials and Methods**

This course develops concepts, methods and techniques for understanding construction materials and assembly techniques related to landscape architecture construction. Students are introduced to materials commonly used in landscape construction (wood, stone and brick, concrete and asphalt), with an emphasis on sustainable landscape construction materials and practices. Methods, concepts and principles for developing construction details are also covered, including conventional and digital communication techniques. Specialized aspects such as structural mechanics for various materials and uses are emphasized.

*Prerequisites: LARCH-207 and LARCH-201 or LARCH-202*

### **LARCH-411 (Formerly LA533) 3-0-3**

#### **LA History 3: Urban Landscape Design**

This course includes an overview of the theories and practice of urban landscape design. The evolution of landscape urban design theories is examined through cultural, sociological, environmental and psychological factors through the study of specific urban design projects. The influence of the design profession, university programs, politics, city government and interest groups are examined along with other forces. Contemporary designs, projects and writings are included in an attempt to identify future directions of urban landscape design in the 21st century.

*Prerequisites: AHIST-205 and WRTG-2XX*

### **LARCH-412 (Formerly LA742) 3-0-3**

#### **LA Tech: Urban Hydrology**

Urban hydrology examines sustainable water resource issues as they relate to landscape planning and site planning and design within the urban or urbanizing context. This includes the theory and techniques associated with soil and water conservation and comprehension of the why, when and where that leads to sustainable planning or design strategies. Topics include surface water hydrology, stormwater runoff estimation, sustainable stormwater management techniques, watershed planning, flood routing and impact mitigation, and erosion and sedimentation control tools and regulations.

*Prerequisite: LARCH-303*

### **LARCH-501 (Formerly LA811) 0-12-6**

#### **LA Design 9: Urban Design II**

In this studio the scope of the project is at the larger urban scale. Whatever the urban design problem, students must deal with the project from inception through design development documentation, including site inventory and analysis, research of appropriate precedents, formulation of concept/design ideation, analysis of various material options and evaluation of the impact of the design upon the community and the physical environment. An appropriate body of theory and research, complemented by sustainable case studies, inform the design process.

*Prerequisites: LARCH-303 and LARCH 411; grade of "C" or better in both LARCH-401 and LARCH-402*

### **LARCH-502 (Formerly LA812) 0-12-6**

#### **Design X for Landscape Architecture**

This course is the last in a series of studios specific to the Landscape Architecture program curriculum. Students work independently and select their own Capstone Project topic. The Capstone Project requires individual research, inventory and analysis, programming and design concept development through final design.

*Prerequisites: LARCH-591; grade of "C" or better in LARCH-501*

**LARCH-506 (Formerly ARCH-505 and LA852) 3-0-3**  
**Professional Practice for Landscape Architecture**

Professional Management for Landscape Architecture introduces the ethical, legal, and administrative issues and procedures encountered in numerous forms within landscape architecture practice. Topics include: types of practice, project management, the ethical and legal frameworks in which professional landscape architecture practice occurs, contractual documents, proposal preparation and fee structuring. The preparation of an effective resume and portfolio concludes the course.

*Prerequisite: LARCH-401 and LARCH-402*

**LARCH-507 (Formerly LA808) 3-0-3**  
**Cultural and Landscape Preservation**

This course covers theories and practices of historic and cultural preservation as a component of a more comprehensive framework for environmental and resource management. Students study the importance of designating historic districts, buildings and landscapes, as well as accomplishing preservation goals, within the existing regulatory environment. Also covered are interpretive methodologies for understanding current cultural and social patterns and practices in the landscape, with an emphasis on sustainability.

*Prerequisites: LARCH-306 or ARCH-421*

**LARCH-509 (Formerly LA809) 3-0-3**  
**Social and Spatial Patterns**

The moral necessity of providing people an urban environment in which to flourish is studied in relation to the physical, institutional and cultural environment. The role and functions of planning and design are examined for their critical contributions and limitations in accommodating a high quality of life.

*Prerequisite: LARCH-306 or permission of instructor*

**LARCH-512 (Formerly LA609) 2-2-3**  
**Urban Landscape Design**

This elective course concentrates on site planning and design of exterior space, with an emphasis on site analysis, design development and many issues involved in the final phases of the design process. Topics include circulation, open-space design, site and building entrances, site materials for walls, paving and furnishings. Included is the installation of a portion of the design in a community urban area.

*Prerequisites: LARCH-307*

**LARCH-513 (Formerly LA841) 2-2-3**  
**LA Tech: Construction Documents**

This is the final course of the construction technology series. The major emphasis is the preparation of a complete set of technical construction documents with specifications, sustainable practices, and cost estimates. Specific topics include: site demolition, layout and dimensioning, and specification writing.

*Co-requisite: LARCH-501*

**LARCH-515 2-2-3**  
**Advanced GIS for Landscape Analysis**

This is an advanced course in Geographic Information Systems (GIS). Students continue their studies in GIS applications appropriate to landscape analyses. GIS is an increasingly important tool for organizing

digital spatial data in an accessible and logical manner for site design, recreation master planning, visual analysis, comprehensive planning, resource management and public advocacy.

*Prerequisite: LARCH-310*

**LARCH-521** **3-0-3**  
**Environmental Policy**

Environmental problems are essentially social, economic and political problems. This course initially traces the evolution of United States environmental policy, legislation and regulations, including the background and context of environmental policymaking; the substantive problems and political process of environmental movements; and contemporary environmental thought with regard to issues of sustainability and environmental justice.

*Prerequisites: WRTG-2XX and at least one Level II College Studies course*

**LARCH-591 (Formerly LA810)** **3-0-3**  
**Capstone Preparation**

In this writing-intensive seminar, students are introduced to qualitative research methods through lectures, discussions and assignments intended to promote independent methods of research and design inquiry. Students are to develop a well-articulated, conceptual framework for their individual capstone design project that includes their research topic, method of analysis, a literature review, case studies and detailed work plan.

*Prerequisites: grade of "C" or better in LARCH-401 and*

*LARCH-402*

**LARCH-599** **0-12-6**  
**LA Design 10: Individual Capstone Project**

This course is the last in a series of studios specific to the landscape architecture program curriculum. Students work independently and select their own Capstone Project topic. The Capstone Project requires individual research, inventory and analysis, programming, and design concept development through final design.

*Prerequisites: LARCH-591 and grade of C or better in LARCH-501*

**LAW-101** **3-0-3**  
**Introduction to Law and Society**

An interdisciplinary introduction to legal systems and the law. Laws are created by social and cultural systems and affected by social, economic and political environments. This course will help students understand the development and impact of legal systems through case studies of many current legal issues and debates. There will also be an introduction to international comparisons.

**LAW-103** **3-0-3**  
**Crime and Justice**

This course provides an introduction to criminal justice in America. Students will examine the criminal justice system and process in the social context of justice and democratic society. They will study the police and criminal courts as political institutions that make decisions with an eye to the press and popular opinion as well as to race, class and justice.

**LAW-105** **3-0-3**  
**American Government**



This course provides an introduction to law and American government in action. In the course students will investigate the structures and processes of American government and the relationships between the three branches of government within the context of how public policy is made and implemented.

**LAW-201** **3-0-3**

**Constitutional Law and the Supreme Court**

This course provides an examination of the sources, growth, development, and interpretation of the United States Constitution. It also examines the role of the Supreme Court in addressing issues of constitutionality, and considers key cases, historically and currently.

**LAW-203** **3-0-3**

**Comparative Legal Systems**

This course provides an introduction to comparative law, and how different legal systems approach the law, legal analysis and legal culture. This course provides an examination of comparative legal systems, which consist of legal processes, institutions and culture, through a series of thematic comparative case studies. It also examines the role of dispute resolution processes in different legal cultures; addresses issues of civil, criminal and administrative law; and considers key cases, historically and currently.

*Prerequisite: WRTG-101*

**LAW-205** **3-0-3**

**Philadelphia Law and Politics**

This course provides a critical introduction to local law and politics. This course will focus on social change in cities, focusing on Philadelphia, in the context of structural urban problems. It provides an examination of the Philadelphia legal and political system by having students learn about processes, institutions and culture, through readings and real world experiences in and around the city of Philadelphia. Students will experience local law and politics through readings and discussions as well as by interacting with members of the legal and political community.

*Prerequisites: WRTG-101 & HIST-1XX*

**LAW-300** **3-0-3**

**International Law**

This course provides an introduction to the international law system that examines the rules binding the international conduct of states and non-state actors. The course covers topics related to the sources and functions of international law, and related issues of jurisdiction and standing. It also focuses on international institutions, and specific issues in international law such as the rules of warfare and peacekeeping; human rights; international trade and communication.

*Prerequisites: LAW-101; WRTG-2XX*

**LAW-302** **3-0-3**

**Law and Ethics**

*(writing intensive)*

This course examines the intersection between ethical issues and law in the context of the United States. The course will consider contemporary cases that illustrate the intersection of contemporary legal and ethical issues. There will be a service-learning component to this class.

*Prerequisites: LAW-101; WRTG-2XX*

**LAW-304** **3-0-3**

## **Law, Media, and Society**

This course examines the dynamic interactions between law, technology and media and how they affect a variety of global social and legal issues, including the democratic process, civil rights, and how individuals relate to each other legally, socially, economically, and sexually.

*Prerequisite: SOC-2XX*

### **LAW-306 3-0-3**

#### **Legal Research, Writing, and Moot Court**

*(writing intensive)*

This course will introduce students to the basic tenets of legal research, writing and persuasive arguing by way of a moot court appellate competition focusing on current controversial topics that affect both American law and society.

*Prerequisites: LAW-101; WRTG-2XX*

### **LAW-411 3-0-3**

#### **Senior Seminar in the First Amendment**

This course examines the first amendment rights of speech, press and association, and focuses on landmark Supreme Court rulings and scholarly commentary. The course will provide students with skills to critically interpret the First Amendment and apply lessons learned to their own lives. It will cover such issues as libel law, obscenity, symbolic speech, and freedom of the press and freedom of association.

*Prerequisites: LAW 201; LAW-302; LAW-306*

### **LAW-499 1-2-3**

#### **Senior Capstone: Public Policy Advocacy**

*(writing intensive)*

This capstone course for the Law and Society major combines a classroom seminar (50 minutes per week) on advocacy skills with a real-world public policy advocacy project within either a self-selected pre-existing organization or an initiative of the student's own creation and design. Students will also receive 100 minutes of designated instruction time, via the web, during which their E-Reports will be reviewed and the status of their projects will be discussed. Students will review and integrate the skills and knowledge they developed during previous courses in the Law and Society curriculum while also applying the principles of public policy theory and oral and written advocacy to the student's selected project.

*Prerequisites: LAW-411 (Senior Seminar)*

## **Mathematics**

### **Quantitative Reasoning**

The College Studies curriculum requires every Philadelphia University graduate to complete a mathematics education that includes differential and integral calculus, to ensure that our graduates have developed quantitative reasoning skills that strengthen their critical thinking abilities. To fulfill this core curriculum requirement, students must complete the highest calculus course for which they are qualified, up to Calculus I.

The specific course sequence will be determined by the student's major and the level of mathematics with which the student enters the University as demonstrated by previous coursework and/or placement testing. The two-course sequences are:

MATH-100/1 (L130/13)1: Finite Math

MATH-103 (L132): Intro. to Calculus

**or**

MATH-102 (L135): Pre-Calculus

MATH-103 (L132): Intro. to Calculus

**or**

MATH-102 (L135): Pre-Calculus &

MATH-111 (L141): Calculus I

**or**

MATH-103 (L132): Intro. to Calculus

and one Free Elective

**or**

MATH-111 (L141): Calculus I

and one Free Elective

**MATH-099 (Formerly M99) 3-2-(3)**  
**Fundamentals of College Mathematics**

This course covers those topics in arithmetic and algebra that are essential to further work involving mathematics. Students will study fractions, decimals and percentages, signed numbers, linear and quadratic equations, exponents and scientific notation, factoring, techniques of graphing, equations of straight lines and linear systems of equations. There will be an emphasis on applications. Use of the scientific calculator will be discussed. Credits earned may not be applied toward graduation requirements. Students must earn a “C” or better to receive credit for fundamentals courses. See “Fundamentals Courses” in the section “University Academic Policies and Procedures: Undergraduate Student Academic Policies.”

*Students required to take MATH-099 must pass the course before taking CHEM 103, Chemistry I.*

**MATH-100 (Formerly L130) 3-2-3**  
**Finite Mathematics**

While the content of MATH-100 is identical to that of MATH-101, more time is devoted during the semester to the review and use of elementary mathematical operations. See MATH-101 for content.

**MATH-101 (Formerly L131) 3-0-3**  
**Finite Mathematics**

An introduction to the concept of a mathematical model, with special emphasis on using functions to model problems in business and economics. The functions and their graphs that are studied (needed for MATH-103) include polynomials (esp. linear and quadratic), rationals, exponentials and logarithms. Applications are made to finance, including annuities. In addition, simultaneous linear equations, Gauss-Jordan elimination, matrix algebra and linear programming are covered.

**MATH-102 (Formerly L135) 3-0-3**  
**Pre-Calculus**

The fundamentals of college algebra, analytic geometry and trigonometry will be covered, with particular emphasis on those topics necessary for the calculus sequence.

**MATH-103 (Formerly L132) 3-0-3**  
**Introduction to Calculus**

Students will be taught an introduction to the differential and integral calculus of polynomials, rational functions, exponentials and logarithms. Emphasis is placed on the use of calculus in the study of rate of change, determination of extrema and area under the curve. Not for Science majors.

*Prerequisite: MATH-100 or MATH-101 or MATH-102*

**MATH-11 (Formerly L141) 4-0-4**  
**Calculus I**

Functions, slope and rate of change, limits, derivations of algebraic functions, maxima and minima applications, indefinite integration, integration by substitution, sigma notation, area between two curves are taught. Knowledge of algebra, geometry and trigonometric functions is assumed.

**MATH-112 (Formerly L142) 4-0-4**  
**Calculus II**

Students will study differentiation and integration of transcendental functions, theory and methods of integration and applications, infinite series, convergent tests, Maclaurin and Taylor series. Convergence of Taylor series.

*Prerequisite: MATH-111*

**MATH-213 (Formerly M113) 4-0-4**  
**Calculus III**

Students will study analytic geometry in 3D-space; algebra of vectors, differentiation and integration of vectors; partial differentiation, multiple integrals, and infinite series.

*Prerequisite: MATH-112*

**MATH-214 (Formerly M121) 3-0-3**  
**Linear Algebra**

Students will study the theory and solution techniques for systems of linear equations; vectors, matrices, determinants; eigenvalues and eigenvectors; vector spaces, and linear transformations.

*Prerequisite: MATH-112*

**MATH-225 (Formerly M122) 3-0-3**  
**Differential Equations**

Students will study first-order equations; constant-coefficient,  $n$ th-order homogeneous and non-homogeneous equations; special non-linear equations; elementary applications; and power series solutions. The course may also include elementary numerical techniques for solutions of ordinary differential equations and other computer topics.

*Prerequisite: MATH-213*

**MATH-316 (Formerly M125) 3-0-3**  
**Partial Differential Equations**

The course will focus on how modeling physical phenomena leads to partial differential equations; the heat conduction, wave propagation and potential equations; classification of linear second-order equations; boundary-value problems; Fourier series; separation of variables and special functions.

*Prerequisite: MATH-225*

**MATH-317 (Formerly M171) 3-0-3**  
**Real Variables**

Students will study topics related to functions of a real variable, including measure and integration; differentiation; abstract spaces; general measure and integration theory.

*Prerequisite: MATH-225*

**MATH-318 (Formerly M173) 3-0-3**  
**Complex Variables**

Students will study analytical functions; Cauchy-Riemann equations; power series; infinite series; calculus of residues; contour integration; and conformal mapping.

*Prerequisite: MATH-225*

**MATH-321 (Formerly M141) 3-0-3**  
**Probability and Statistics**

Students will study the fundamentals of probability, discrete and continuous random variables, probability distributions, and hypothesis testing.

*Prerequisite: MATH-112*

**MATH-323 (Formerly M143) 3-0-3**  
**Mathematical Statistics**

This course is designed to give the student some of the background needed to pursue more advanced courses that use statistical techniques. The content of the course will include topics from probability theory that are necessary for an understanding of the mathematical foundations of statistics. These topics will include: probability distributions, likelihood functions, properties of expectation operators, moment-generating functions, the central-limit theorem, confidence intervals and hypothesis testing. The student will be expected to be familiar with the topics of calculus through multiple integrals.

*Prerequisite: MATH-321*

**MATH-326 (Formerly M163) 3-0-3**  
**Modern Algebra**

Study of sets and mappings; group, ring and field theory; homomorphisms and isomorphisms; Lagrange's theorem; abelian and cyclic groups; symmetric groups; polynomial rings.

*Prerequisite: MATH-214*

**MATH-331 (Formerly M131) 3-0-3**  
**Mathematical Methods in Chemistry, Physics and Engineering**

This is an advanced course covering topics chosen from the following: matrix algebra, Fourier series, Sturm-Liouville systems, boundary-value problems for ordinary differential equations, Laplace's equation, introduction to Bessel's equation and Bessel functions.

*Prerequisite: MATH-225*

**MENGR-301 3-2-3**  
**Machine Design**

Students will study kinematics and dynamics of machinery, including analytical kinematics, force analysis, cam design and balancing, and the application of elementary mechanics of solids to analyze and size machine components for stress and deflection. Introduction to finite element analysis with emphasis on beam and plate models will be taught.

*Prerequisite: ENGR-218*

**MENGR-325 3-0-3**  
**Engineering Vibrations**

Vibrations will be a thorough treatment of vibration theory and its engineering applications, from simple degree to multi degree-of-freedom system. Topics will include harmonic excitation, forced responses, multiple degree-of-freedom systems, design for vibration suppression, distributed parameter systems, vibration testing and experimental modal analysis, and finite element method.

*Prerequisites: ENGR-218*

**MENGR-405 3-1-3**  
**Introduction to Mechatronics**

This course will prepare students in the interdisciplinary field of engineering that comprises the integration of mechanics, electronics and computer technology coordinated by control architecture. Emphasis on computer-integrated electromechanical systems will help the students to understand the design, analysis and practical approach of system integration.

*Prerequisite: ENGR 322*

**MENGR-407** **3-0-3**  
**Thermodynamics and Heat Transfer I**

This course considers fundamental laws governing the transformation of heat into mechanical energy. Properties of gases and vapors and the processes between states are explored as are applications of the first and second laws of thermodynamics. A study of the transfer of heat by conduction, convection and radiation in steady and unsteady flow is also conducted.

*Prerequisite: MATH-112, PHYS-201, PHYS-201L*

**MENGR-427** **3-0-3**  
**System Dynamics and Controls**

Students will study modeling of physical systems including electromechanical systems; reduction of block diagrams; signal flow graphs and Mason's gain formula; response of second order systems: natural frequency and damping ratio and how they relate to rise-time, peak-time, settling-time, and overshoot; stability and the Routh-Hurwitz criterion; steady-state error and sensitivity; root locus; and Design of cascade compensators using root locus and frequency response.

*Prerequisite: IENGR-311, ENGR-218*

**MENGR-428** **3-0-3**  
**Thermodynamics and Heat Transfer II**

This course covers energy analysis; vapor and gas power cycles; vapor and gas refrigeration cycles; thermodynamic properties of mixtures and solutions; psychrometry and air-conditioning; reacting mixtures and combustion.

*Prerequisite: MENGR 407*

**MGMT-104** **1.5-0-1.5**  
**Management Foundations**

Designed for majors in C-DEC, this course enables students to understand the role of managers in diverse, global, and competitive organizations, and within the context of 21st Century management theory. Topics include decision-making, motivation, leadership, human resources, ethics and social responsibility, and management in a global environment. Students will explore these topics through assignments and exercises designed to enhance their managerial skills.

**MGMT-301 (Formerly B123)** **3-0-3**  
**Principles of Management**

Effective management is fundamental for the successful operation of all types of enterprises. The course will present the principles, techniques and concepts needed for managerial analysis and decision making. Functions highlighted include planning, organizing, staffing and controlling.

**MGMT-303** **3-0-3**  
**Logistics in East Asia**

Given the global nature of the world of logistics, today's students must have a grasp of the political, social and culture factors that contribute to forming a successful consumer products strategy. A student's understanding of geo-political structure will allow them to explore logistic strategies, learn the key steps of the analytical process used to help grow a global value chain, learn to define measurable objectives and develop strategies to promote logistic efficiencies.

*Prerequisite: MGMT-301 or MGMT 104 (for DEC students only)*

**MGMT-305 (Formerly B148) 3-0-3**  
**Apparel/Textile Brand Management**

Brand building is an essential strategy for all successful companies in the apparel supply chain. Classroom instruction will focus on the techniques of brand growth. Case studies will be used as the foundation for a research project.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

**MGMT-307 (Formerly B168) 3-0-3**  
**International Management**

Introduces students to the special aspects of managing a company in the global environment. Issues involved in understanding and applying the international and cross-cultural dimensions of the traditional management functions, such as organization, control, motivation, human resources and labor relations; and organization theory are studied. Lectures, readings, exercises and cases will be used.

*Prerequisite: MGMT-301 or MGMT 104 (for DEC students only)*

**MGMT-309 (Formerly B135) 3-0-3**  
**Systems Analysis**

This course introduces the structured approach to design of new applications software, software systems, networks and/or World Wide Web installations. It deals with the usual life cycle for such operations. Analysis includes approaches to specifying input and output, file structures, trade-off techniques, implementation, documentation and testing. Other approaches such as rapid application development and object-oriented analysis are discussed.

*Prerequisite: MIS-202*

**MGMT-310 (Formerly B160) 3-0-3**  
**People and Teams in Organizations**

The course includes an in-depth exploration of topics such as communication, group dynamics, group roles, team building, power and politics, leadership and negotiation and conflict resolution. In addition, issues of organizational culture and diversity are examined. Through readings, discussions, class activities and projects, students learn how to be effective organizational communicators, team members and leaders. Students also gain an understanding of culture and diversity issues and how to effectively manage them.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only), junior status*

**MGMT-311 (Formerly B176) 3-0-3**  
**Colloquium in Management**

Consideration of selected relevant issues in management and society that are of serious interest to students and faculty, such as technology of the future, impact of data banks, management and public policy, planning systems, education and human resources will be discussed.

*Prerequisites: senior status, faculty recommendation and 3.5 or better G.P.A.*

**MGMT-315 (Formerly B165) 3-0-3**  
**Communications, Negotiations, and the Creative Economy**



This is a course in organizational politics — power, influence, conflict and conflict management. It has two goals: first, to develop students' skills in recognizing politics and conflict situations; and second, to teach students to use negotiating to achieve personal organizational goals. Through readings, discussion and role-plays, a wide range of conflict and negotiating contexts will be considered. These include situations in interpersonal, interorganizational and union-management relationships.

*Prerequisites: MGMT-301, or MGMT 104 (for DEC students only), junior status*

**MGMT-316 (Formerly B184) 3-0-3**  
**Health Services Management**

An analysis of the managerial process as it relates to the planning, organizing, staffing, directing and controlling of health care services. The techniques of effective decision making and problem solving are addressed. A systems orientation, as it applies to the health care services organization, forms the theoretical basis of the course. Only available in the evening.

*Note: For students in the B.S. for Health Services Management program. This course replaces MGMT-301 Principles of Management or MGMT 104 (for DEC students only) as a prerequisite for subsequent courses.*

**MGMT-320 (Formerly B162) 3-0-3**  
**Human Resource Practices and Tools**

This course surveys the roles, policies and procedures of human resource management (HRM) in organizations today. Students learn the steps to staff and motivate a workforce and appreciate the role of quantitative and qualitative decision making in HRM. Course materials deal with environmental impacts on HRM, equal employment opportunity, human resource planning, selection, performance evaluation, wage and salary administration, training and other relevant topics.

*Prerequisites: MGMT-301, or MGMT 104 (for DEC students only), junior status*

**MGMT-326 (Formerly B144) 3-0-3**  
**Total Quality Management Solving Methods**

The principles of Total Quality Management (TQM) are becoming the standards of practice for businesses. This course explores the history of TQM and the principles of Deming and the other major contributors to current TQM practices. How businesses use TQM principles to improve processes, products and services, involve all employees and gain a competitive edge will be studied. The application of TQM to a variety of industries will be explored.

*Prerequisites: MATH-321 or STAT-201; MGMT-301 or MGMT 104 (for DEC students only); MKTG-102 or MKTG 104 (for DEC students only); pre- or coregistration in MATH-321 or STAT-201*

**MGMT-327 (Formerly B187) 3-0-3**  
**Emerging Issues in Health Care**

The purpose of this course is to explore the current trends in health care and issues affecting the organizational changes in the industry with regard to delivery of health care services in a wide variety of settings. Topics will include history of U.S. health care, current reform proposals, universal health care insurance, ethical issues, gerontological issues, labor relations and the changing workforce in health care and comparative perspectives of health care delivery in other countries. Only available in the evening.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only) or MGMT-316, junior status*

**MGMT-331 (Formerly B147) 3-0-3**  
**Compensation and Benefits**

This course is designed to provide participants with an understanding of the concepts, components and activities related to designing, implementing and administering a compensation and benefits program. The compensation policies of internal consistency, external competitiveness, employee contribution and plan administration will be examined in detail. Techniques explored are job analysis, job description, job evaluation, market surveying, pay policy-line derivation, incentive programs, planning and budgetary controls. Only available in the evening.

*Prerequisite: MGMT-301 or MGMT 104 (for DEC students only)*

**MGMT-381 (Formerly B199) 0-0-3**  
**Independent Study in Management**

Students will complete intensive independent study of a chosen subject. The student is expected to read a substantial number of major works in the field and to prepare a critical documented paper. See also the statement on Independent Study under ““University Academic Policies and Procedures: Common Academic Policies for All Students.”

*Prerequisites: permission required. See appropriate form online at the University Registrar’s webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

**MGMT-401 (Formerly B141) 3-0-3**  
**Operations Management**

This course is a comprehensive survey of production and service operations management, topics and functions. Topics include methods and work measurement, materials management, plant location and layout, production planning and control, maintenance, quality control, “Total Quality,” Japanese management styles, “Systems Approach,” and decision tools such as PERT, linear programming, queuing theory, sampling and simulation. Service-delivery applications and activities are also highlighted.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only) and MATH-103 or MATH-111; pre- or Co-requisite: STAT-202 or MATH-321*

**MGMT-405 (Formerly B149) 3-2-4**  
**Apparel/Textile Supply Chain Management**

This course will bring into sharp focus the global relationship that exists between all of the elements of the textile-apparel-retail supply chain. Areas covered include traditional management functions of control over timeliness of production, and quality and labor relations in the global marketplace.

*Prerequisite: FASHMGT-401*

**MGMT-411 (Formerly B170) 3-0-3**  
**Entrepreneurship Seminar**

The student assumes the role of the initiator and manager of a firm. Emphasis is on the required planning prior to the inception of operations and entrepreneurial problems in achieving cash-flow equilibrium. Each student is required to prepare a formal business plan. Interdisciplinary concepts are studied. May be used as a management elective.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only), MKTG-102 or MKTG 104 (for DEC students only), senior status*

**MGMT-412 (Formerly B172) 3-0-3**

**Seminar: Leading Organizational Innovation and Social Responsibility**

This course is designed for senior management majors and integrates and extends concepts learned in other upper-level management courses. The dynamic nature of management is emphasized through reading, analyzing and discussing recent literature in terms of the current business environment. Students examine topics including 21st-century career management; the role of education and technology in organizations; and future trends in management and organizations. The course includes individual and group readings, cases, and research projects that are presented as written and oral assignments.

*Prerequisites: senior status, pre- or Co-requisite: MIS-202*

**MGMT-413 (Formerly B186) 3-0-3**  
**Health Services Management Seminar**

This course will examine advanced topics in health-services management. An atmosphere for shared learning is promoted by individual and group research in substantive areas relevant to the health-services industry. This course is only available in the evening.

*Prerequisites: MGMT-428, MGMT-316*

**MGMT-416 (Formerly B145) 3-0-3**  
**Training and Development**

A course designed to provide students interested in the field of human resources with the knowledge and skills necessary to understand the processes of learning, training and development, and their applications in business and industry. Students will learn adult-learning theories, identification of training and program needs, and program design and evaluation. The course includes participative lectures and discussion, media techniques, case studies, role-play, team-building/group activities, games and simulations and instruction methodology. This course is only available in the evening.

*Prerequisite: MGMT-320*

**MGMT-418 (Formerly B161) 3-0-3**  
**Industrial Relations**

This course investigates union-management relations in both private and public sectors. Students develop an understanding of the industrial-relations systems in the United States, including past and current changes, union and management responses to changes and the future of union-management relations. Students learn to appreciate bargaining, and increase their negotiating skills through discussing and applying collective-bargaining and other dispute-resolution techniques in a negotiation simulation.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only), junior status*

**MGMT-419 (Formerly B179) 3-0-3**  
**Diversity Management**

This course focuses on managing a diverse workforce and how organizations can change systems, structures and practices to eliminate barriers that keep diverse workforces and organizations from reaching full potential. The course examines research and practice in diversity management on topics including interpersonal skills, training, evaluation, managerial practices, recruiting, retention, benefits and compensation. This course may not be taken if student completed as a special topics course, MGMT-311.

*Prerequisite: MGMT-301 or MGMT 104 (for DEC students only)*

**MGMT-428 (Formerly B183) 3-0-3**

### **Health Services Delivery System**

This course will provide an overview of the history, evolution and major components of U.S. health care systems. Systems theory will form the basis for this course. Topics covered will include the organization of health care services, the hospital, the physician, supply and demand in health care, third-party payers, the role of government, managed care and comparisons of health care systems in other countries. This course is only available in the evening.

#### **MGMT-490N (Formerly MGMT-490, B171) 3-0-6** **Business Policy and Strategy**

*(writing intensive)*

The process and techniques of strategy formulation, implementation and evaluation are studied and applied. Case studies of domestic and international companies and not-for-profit organizations are used to integrate strategic management concepts with knowledge acquired in other functional area courses. Includes extensive written individual and team assignments and oral presentations. Students taking this course cannot take MGMT-491 for credit.

*Prerequisites: senior status, (INFOSYS 101 removed), MGMT-301, or MGMT 104 (for DEC students only), MKTG-102, or MKTG 104 (for DEC students only) FINC-301*

#### **MGMT-491N (Formerly MGMT-491, B180) 3-0-6** **Textile, Retail and Apparel Business Policy and Strategy**

*(writing intensive)*

The process and techniques of strategy formulation, implementation and evaluation are studied and applied as they pertain to the textile, apparel and retail industries. Case studies of domestic and international companies are used to integrate strategic-management concepts with knowledge acquired in other functional area courses. Includes extensive written individual and team assignments and oral presentations. Students taking this course cannot take MGMT-490 for credit.

*Prerequisites: senior status, MGMT-301, MKTG-102, FINC-301, TEXT-101, FASHMGT-101*

#### **MIS-202 (Formerly IS16) 3-0-3** **Management Information Systems**

This course is designed for future managerial end users of e-business information systems who will both use and manage information technology (IT). The course addresses the strategic, tactical and operational uses of IT in business for problem solving. Frequent computer assignments will complement the topics discussed in class as the student develops more sophisticated skills in databases design, implementing queries and reports, exporting data to spreadsheets and using spreadsheets and graphics to model businesses for decision making.

*Prerequisite: INFO-101*

#### **MIS-207 (Formerly IS12) 3-0-3** **Programming for Problem Solving**

This course introduces an appropriate high-level programming language or languages and explores computer solutions to business-related problems. The course will include techniques of problem definition, planning, writing well-structured programs, testing and debugging and documentation. Extensive practice will be gained in writing programs on the University's computing equipment.

*Prerequisite: MIS-301*

**MIS-301 (Formerly IS10) 3-0-3**  
**Survey of Programming Languages**

This course will provide an overview of the basic structures and methodologies for the major functional and object-oriented programming languages. The course will discuss the different syntaxes of the language as well as their similarities. Languages will include C, C++, Visual Basic, Java and a review of the basic Internet languages.

**MIS-302 (Formerly IS74) (Also listed as ENGR-217) 3-0-3**  
**Information Systems Design**

The course deals with analysis and design of computer-based information systems. This includes definition of databases, measures of effectiveness and management-staff interfaces. This begins with analysis of the situation and its particular needs before attempting a solution. Depending on the size and background of class members, students may form groups to develop projects of their own choosing or review case studies from engineering or manufacturing or service environments for analysis and design.

*Prerequisites: MATH-103 or a more advanced math course*

**MIS-304 (Formerly IS73) 3-0-3**  
**Foundations of Artificial Intelligence**

Overview of the computational and knowledge engineering issues and techniques used in artificial intelligence, leading to the development of expert and fuzzy systems, including representations of knowledge, search strategies for production systems, rule-based deductions, heuristic programming, paradigms for synthesis and analysis of class systems, exact and inexact reasoning models, implementation examples from machine learning and natural language processing.

*Prerequisite: MIS-405*

**MIS-305 (Formerly IS11) 3-0-3**  
**Database Analysis, Design and Management**

This course will examine the design and use of databases. Most of the work will be done using relational-database management systems. Topics include database analysis and design using Entity Relationship modeling tools, design of well-structured relations (tables) and implementation of appropriate applications. Other models, such as object-oriented databases, will be introduced. In addition, the ethical collection, use and management of data, as well as security issues, will be addressed. Problems in actual database implementation will be assigned using the University's computer facilities.

*Prerequisite: MIS-207 or MIS-202*

**MIS-312 (Formerly IS21) 3-0-3**  
**Ethical and Social Issues of Computing**

This course provides an understanding of the ethical and societal issues associated with the computing field. Students will learn the responsibilities of a computer professional, the basic elements of ethical and social analysis and the basic skills for doing ethical and social analysis, with application to computing issues.

**MIS-323 (Formerly IS83) 3-0-3**  
**Operating Systems**

Study of operating system concepts common to various classes of computers, including file systems, CPU scheduling, memory management, virtual memory, disk scheduling, deadlocks, concurrent

processes and programming, protection and security and distributed systems. Exploration of various aspects of specific systems (e.g., UNIX, VMS, MS-DOS, Windows).

*Prerequisite: MIS-405 or permission of the instructor*

**MIS-371 (Formerly IS91) 3-0-3**  
**Special Topics**

This course provides an in-depth treatment of recent advances in subjects of current interest in the field of computer science. The special topics in a given semester will be announced before registration. Programming projects will be assigned in a language selected by the instructor. Oral and/or written reports are required.

*Prerequisite: junior status*

**MIS-381 (Formerly IS98) 0-0-3**  
**Independent Study in Information Systems**

This course allows students to pursue topics not covered in the regular program. The student will either: (1) study in some detail a topic of their choice (subject to faculty approval); or, (2) write a substantial documentation. (The University retains the rights of use.) The faculty supervisor will test the student on the material. An oral presentation of the results of the study will be required. This course cannot be taken to replace a required course. For further details, see "Independent Study" in the "University Academic Policies and Procedures: Common Academic Policies for All Students."

Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

**MIS-401 (Formerly IS13) 3-0-3**  
**Computer Networking**

This course offers students an in-depth study of computer networks and their role in the information technology infrastructure of an enterprise. Topics will include logical and physical organizations of computer networks, hardware and software, the ISO model, communications protocols especially TCP/IP. Students will study LANs, MANs, BNs and WANs. Network design, management, performance, control, encryption and security will be discussed. The University's computer equipment will be used for hands-on, network-management assignments.

*Prerequisite: junior status or permission of the instructor*

**MIS-404 (Formerly IS15) 3-0-3**  
**Data Analysis for Decision Making**

This course continues the development of students' skills in data analysis and modeling. Emphasis will be on data warehousing and data mining. Topics will also include non-relational databases and management systems. Emphasis will be on effectiveness and uses of data analysis for management decisions.

*Prerequisites: MIS-301, MIS-305*

**MIS-405 (Formerly IS52) 3-0-3**  
**Programming In C**

This course introduces fundamental principles of computer science as applied to problem solving. Main topics include problem specification and decomposition, design of algorithms, evolution of computers and computing, data and procedural abstractions, fundamental instructions, control mechanisms and modular programming. Programming projects will be in C.

*Prerequisite: MIS-301 or permission of the instructor*

**MIS-406 (Formerly IS53) 3-0-3**  
**Programming in C++**

This course is the continuation of MIS-422 and introduces more advanced problem-solving techniques through the use of object-oriented techniques such as information hiding and code reuse, classes and data abstractions, single/multiple inheritance, operator/function overloading and polymorphism. More specifics include pointers, stacks, queues, linked lists, binary trees, linear/binary search techniques, recursion and sorting. Programming projects will be in C++.

*Prerequisite: MIS-405*

**MIS-407 (Formerly IS14) 3-0-3**  
**Project Engineering**

The course provides a practical introduction to design and implementation of large- and small-scale projects. It will include a survey of current project procedural paradigms. When feasible, students will work in groups to develop a tangible product in an area of interest not previously defined. Such projects may involve software, industrial design, textile product development or other. Student groups will be expected to follow formal, project-management guidelines including creation and assignment of tasks, budgeting, critical-path analysis, reports, et al. Software support for projects will be utilized.

*Prerequisite: MATH-103*

**MIS-411 (Formerly IS23) 3-0-3**  
**Discrete Structures**

This course will cover a review of set algebra; and the study of mathematical reasoning; Boolean algebra and logic circuits; combinatorics; discrete probability; graphs; trees; recurrence relations; and dynamical systems.

*Prerequisite: MIS-301*

**MIS-413 (Formerly IS31) 3-0-3**  
**Algorithms and Data Structures**

Students will study of advanced programming techniques and data representations, including recursion, stacks and queues; packaging data abstraction; advanced searching and sorting; files; binary search trees; analysis of algorithms and computational complexity; and advanced data structures. Programming assignments will be submitted.

*Prerequisite: MIS-301*

**MIS-422 (Formerly IS51) 3-0-3**  
**Applied Software Development**

This is a second-level programming course offering students experience in planning, developing and testing short software projects. This course will be a continuation of MIS-207. Class periods will involve development methodology, software approaches and a structured walk-through for each project, as well as provide time for students to report on progress and discuss project approaches and problems. Computer languages and “script” currently undergo rapid development and change necessitating equivalent evolution of this course.

*Prerequisite: MIS-207*

**MIS-425 (Formerly IS85) 3-0-3**

### **Web Construction and E-Commerce Applications**

This course will focus on the use of new and emerging technologies to create web-based designs and programs to support business and e-commerce applications. The course will require the completion of several program assignments and projects.

*Prerequisite: MIS-301*

### **MKTG-102 (Formerly B221) 3-0-3** **Principles of Marketing**

This is a basic course in which the main functions, institutions and concepts of marketing are studied. Attention is focused on providing an analytical and corporate framework for studying and understanding the marketing system within changing environmental forces.

### **MKTG-104 1.5-0-1.5** **Marketing Foundations**

This is a basic course in which the main functions, institutions and concepts of marketing are studied. Attention is focused on providing an analytical and corporate framework for studying and understanding the marketing system within changing environmental forces.

### **MKTG-115 (Formerly B235) 3-0-3** **Fashion Merchandising**

This course provides students with a general understanding of Fashion Merchandising and is designed to help students to become familiar with the fashion business and its “industries.” It discusses the men’s, women’s and children’s wear and home furnishings and their interrelationships. This course uses an interdisciplinary approach to the fashion business as it relates to cultural, historical and economic features as a central theme.

### **MKTG-207 (Formerly B231) 3-0-3** **Consumer in the Market Place**

This course provides comprehensive understanding of the many dimensions of consumer behavior and the contributions of behavioral science to marketing. The focus will be on understanding consumer needs.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

### **MKTG-217 (Formerly B241) 3-0-3** **Retailing Strategy and Structure**

Students will gain a comprehensive understanding of retail strategy in the dynamic retailing environment. Special attention is given to retailing structure since it underlies the strategic decision making of retailing management.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

### **MKTG-302 (Formerly B237)** **Product Development and Innovation**

This course is designed to expose students to the concept of innovation and an understanding of the process of product/service development and innovative marketing. Students learn how a product is



conceptualized and ultimately commercialized. They will understand the factors that play a central role in the process.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

**MKTG-310 (Formerly B240) 3-0-3**

**Integrated Marketing Communications**

This course examines the vital role of marketing communications in the development of marketing strategy. Integrated marketing communications (IMC) is emphasized as students explore the use of advertising, personal selling, sales promotions, Internet marketing, database marketing, public relations, and more to enhance brand equity. The strategy and planning involved in the development of integrated campaigns is emphasized.

*Prerequisite: MKTG-207*

**MKTG-315 (Formerly B233) 3-0-3**

**Marketing in a Digital Environment**

This course investigates the ways in which new technologies are changing the field of marketing. Major topics include Internet advertising, database marketing, sales-force automation and customer relationship-management software tools. Other topics include the impact of new technologies on distribution strategies, online pricing models, mass-customization strategies, data mining and media implications.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

**MKTG-318 (Formerly B243) 3-0-3**

**Sales Management**

Sales management is the planning, direction and control of the selling activities of a business. Topics include recruiting, selecting, training, equipping, assigning, routing, supervising, compensating and motivating the sales force. This course focuses on business-to-business marketing.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

**MKTG-324 (Formerly B244) 3-0-3**

**International Marketing**

This course is an investigation of the marketing concept in a global environment. Marketing practices through which various businesses adapt to the international environment are studied. Attention is also given to comparative marketing systems and planning and organizing for export-import operations.

*Prerequisite: MKTG-102 or MKTG 104 (for DEC students only)*

**MKTG-328 (Formerly B251) 3-0-3**

**Merchandise Buying/Operations**

The course provides the student with the understanding of the interdependence of the merchandising and operations functions. Students have a comprehensive understanding of the retail business from gross sales to net profit. To achieve this understanding, students are required to prepare a merchandising/operations plan that integrates all of the elements of doing business in the retail environment.

*Prerequisites: MKTG-217*

**MKTG-381 (Formerly B299) 0-0-3**

### **Independent Study in Marketing**

Intensive independent study of a chosen subject. The student is expected to read a substantial number of major works in the field and to prepare a critical, documented paper. See "Independent Study" under "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Prerequisites: permission required. See appropriate form online on the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

#### **MKTG-391 (Formerly B261) 3-0-3** **Marketing Research**

This course exposes students to marketing-research techniques and procedures used in gathering, recording, analyzing and reporting of data related to marketing problems.

*Prerequisites: MKTG-102, or MKTG 104 (for DEC students only) MKTG-207 and pre- or Co-requisite STAT-202*

#### **MKTG-408 (Formerly B303) 3-0-3** **Survey of E-Commerce**

This is an introductory course in which the size, scope and impact of e-commerce is explored. This course includes discussions about how technology impacts business processes and transactions. A significant part of the course will discuss the e-business technology platform. Additional topics include business-to-business market exchanges, online auctions, electronic-payment systems, market valuation of e-commerce firms, and government policies and issues concerning e-commerce such as privacy, regulations and ethics.

#### **MKTG-412 (Formerly B262) 3-0-3** **Marketing Strategy Seminar**

Skills will be developed for making better decisions by learning to integrate various topics of marketing. The importance and know-how of anticipating, recognizing and adapting to external forces on the decision-making process and organization will be discussed. Emphasis will be placed on incorporating the most recent literature, which is of theoretical and practical importance, in the decision-making process. The course is built around readings, marketing cases, research papers and problem sets. A comprehensive marketing plan will be developed.

*Prerequisites: senior status; pre- or Co-requisites: MKTG-207, MKTG-310, MKTG-391*

#### **MKTG-413 (Formerly B333) 2-2-3** **E-Site Design**

E-Site Design is an introductory web design course. Students explore fundamental concepts of web site design and learn how to develop, post and maintain a web site using popular software. Emphasis is on mastering basic web site design and management skills for business applications that exceed a rudimentary knowledge of the techniques offered by application software packages. The student will engage in hands-on computer experience in the computer labs.

*Note: for Graphic Design or Interactive Design and Media majors only.*

*Prerequisite: permission of the director of Graphic Design Communication.*

### **Physician Assistant Studies**

Note: All of the below listed PAS courses, with the exception of PAS-400, are restricted to students matriculated in the Physician Assistant Studies Program.

**PAS-400** **1-0-1**  
**Medical Terminology**

This competency-based course covers the structure, definition and utilization of basic medical terminology for students entering the health professions. The course is designed for students with some health care experience. Independent reading, workbook exercises, case studies and interactive computer software are the learning modalities used in this experience.

**PAS-407A & B/PASF-507 A & B GR** **3-4-5**  
**Advanced Anatomy**

This lecture and laboratory course will review basic histology along with the major anatomical structures of the human using a regional organization. Laboratory sessions utilizing microscopic examination, models and cadaver specimen dissection will augment lecture material.

*Prerequisite: BIOL-202 and BIOL-202L*

**PAS-410/PASF-510 GR** **2-0-2**  
**Medical and Professional Ethics**

Understanding the philosophical principles related to biomedical ethics, patient-practitioner relationships and the role of the physician assistant provider within the health care system are the main topics encompassed in this lecture and discussion seminar course.

**PAS-411/PASF-511 GR** **3-0-3**  
**Applied Behavioral Science**

The topics of developmental psychology, abnormal psychology, human sexuality, stress responses, behaviors related to psychological health and illness and the diagnosis and management of common psychological disorders are the focus of this lecture course.

**PAS-413/PASF-513 GR** **3-0-3**  
**Medical Physiology and Pathophysiology**

This lecture course is designed to teach the principles of human medical physiology along with the physiological mechanisms of common disease states.

*Prerequisites: BIOL-202 and BIOL-202L, BIOL-221 and BIOL-221L*

**PAS-417/PASF-517 GR** **4-2-5**  
**Medical History and Physical Diagnosis**

This lecture and practical laboratory course will introduce the physician assistant student to the techniques for eliciting a medical history and performing a complete physical examination on humans. The interpretation of history and physical examination findings as applicable to physiological and disease states will also be discussed. Laboratory sessions, hospital experiences and writing assignments will enhance the learning experience.

**PAS-421/PASF-521 GR** **2-0-2**  
**Medical Genetics and Microbiology**

This lecture course presents current concepts and issues in medical genetics, immunology and microbiology. It focuses on diseases of genetic origin, the function of the immune system and emerging trends in disorders caused by microorganisms.

*Prerequisite: BIOL-221 and BIOL-221L*

**PE-00** **0-1-5**  
**Varsity Athlete**

Students who have participated on one of the University's 12 intercollegiate sports teams for one season will satisfy the requirement for this course. Students must register for this course in the semester they expect to receive the course credit. Students may register for this course two times.

**PE-02** **0-1-5**  
**Recreation and Wellness**

Students participate in 15 or more hours of recreation and wellness activities offered through the Department of Athletics. Opportunities include participation in intramural sports, recreational courses in team and individual sports, and wellness courses such as yoga, stress management, and tailored exercise programs. All activities must be validated by a representative from the Department of Athletics to earn credit. Students must register for the course at the beginning of the semester to receive course credit.

**PHOTO-101 (Formerly PHOTO-111 and H323)** **2-3-3**  
**Introduction to Photography: Black and White**

This course introduces the technical aspects and controls of a manual 35mm camera together with silver-based black & white film developing and printing methods. Students will develop a fundamental vocabulary for constructive critique of photographs and will generate a photographic portfolio piece, exploring a subject of interest.

**PHOTO-102 (Formerly DIGD-310 and D627)** **1-5-3**  
**Introduction to Photography: Digital**

This course is an introduction to the conceptual and technical aspects of digital photography through projects, presentations, critiques and lectures based on both classical and constructed methods of image creation. Topics include: basic camera functions, importing files from digital media, color management, image improvement and manipulation using Adobe Photoshop, Bridge, and Light Room and preparing final images for print and/or screen presentation.

**PHOTO-201 (Formerly PHOTO-301 and G622)** **1-5-3**  
**Studio Photography**

This course introduces students to the fundamentals of photographic image making within the controlled environment of the studio. Emphasis is given to lighting techniques using professional strobe equipment; single-lens reflex digital capture on the computer, software for capturing digital photographs, as well as the role of props and setting in the generation of portraiture, fashion and still-life images.

*Prerequisite:* PHOTO-101 or PHOTO-102 or PHOTO-204

**PHOTO-204 (Formerly GRAPH-204 and G621)** **1-5-3**  
**Introduction to Photography for Graphic Design Communication**

Required for Graphic Design Communication majors, this course focuses upon photography as a tool for graphic designers. Students are introduced to: film and digital camera use, exposure, image processing, and printing; table-top set-ups with professional studio lighting equipment; and digital documentation of work for portfolios.

*Prerequisite:* DSGNFND-203 or permission of the director of the Graphic Design Communication program

**PHOTO-302 (Formerly ARCH-411 and A605)** **2-2-3**

## **Architectural Photography**

In this course students acquire the skills to apply a documentary methodology to thematic explorations of subject matter, specifically related to architecture and the built environment, interiors and cultural landscapes. Students learn to critique photographs of buildings and spaces and to produce high-quality black and white prints.

### **PHOTO-303 (Formerly ARCH-305)**

**2-2-3**

#### **Introduction to the View Camera: A Survey of Historical and Contemporary Techniques**

This course covers the fundamentals of view camera photography by utilizing the 4x5 large-format camera. Through exploration of traditional view camera subjects architecture, landscape, still life and portraiture students learn view camera movements, exposure, sheet film processing, color film use, film scanning, and large scale inkjet printing. Historical printing processes, including salted paper, calotype, cyanotype, tintype and platinum/palladium, are examined as a complement to contemporary methods. Emphasis is placed on the view camera as a tool for documentation, narration and expression supplements consideration of the mediums technical aspects.

*Prerequisite: PHOTO 101 or GRAPH-204 or PHOTO-302*

### **PHOTO-307 (Formerly ARCH-307)**

**3-0-3**

#### **History of Photography**

*(writing intensive)*

Since its invention in 1839, photography has played a pivotal role in the formation of modern visual culture. Focusing upon chronological, thematic and technological developments, this course investigates the diverse expressions and applications of the photographic image within a nexus of philosophical, social, economic, scientific and aesthetic contexts. Particular emphasis is placed upon: debates concerning the nature and function of images; the medium's impact upon portraiture, high art, popular culture, fashion and social documentation; and the rise of photojournalism and advertising. Photography as a discrete language of signs, symbols and metaphors with implied narratives is emphasized.

*Prerequisite: WRTG-2XX*

### **PHOTO-381 (Formerly G993)**

**0-0-3**

#### **Independent Study in Photography**

Independent Study in Photography is a one term student-initiated project limited to those students who have finished the full sequence of photography courses. A student proposes a project and works independently with guidance from the instructor. See "Independent Study" in "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Prerequisite: Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.*

### **PHOTO-436 (Formerly ARCH-436)**

**2-2-3**

#### **Historic Preservation Documentation: Photography**

Begun in 1933, the Historic American Building Survey (HABS) is the first federal preservation program established to document America's architectural heritage. In this course students learn the fundamentals of HABS documentation methods for the production of archival records of historic structures and places, utilizing the 4 x 5 large-format camera. Through field work and labs, students photograph, print, research and narrate comprehensive, technically proficient photographic essays that

represent the salient aspects of historic structures, complexes and sites in accordance with HABS standards.

*Prerequisites: ARCH-421 or PHOTO-101 or PHOTO-204*

**PHYS-101 (Formerly L313) 3-2-3**  
**General Physics**

*(for non-science majors)*

The basic laws of mechanics and thermodynamics are covered. The emphasis will be on understanding the major laws of physics and the way they manifest themselves in practical applications and in laboratory experiments. The areas of importance for architecture and interior design, such as sound and illumination, are discussed.

*Prerequisites: MATH-100 or MATH-101 or MATH-102 or MATH-103 or MATH-111*

**PHYS-201 (Formerly L325) 3-0-3**  
**Physics I: Mechanics and Heat**

*(required for science and engineering majors)*

A calculus-based course emphasizing Newton's three laws of motion and the conservation laws of energy, linear momentum and angular momentum as first integrals of the dynamics. Additional topics in mechanics include stress and strain, simple harmonic motion and hydrostatics. Absolute temperature scales, thermal expansion, specific heats, methods of transfer of heat energy, ideal gases and real gases are considered before studying the first and second laws of thermodynamics, with the concept of entropy emphasized in the latter.

*Prerequisite: MATH-111*

*Co-requisite: MATH-112, PHYS-201L*

**PHYS-201L (Formerly L325) 0-3-1**  
**Physics I: Mechanics and Heat Laboratory**

In this one-credit laboratory course students perform, analyze and submit lab reports based on experiments which test the theories developed in Physics I: Mechanics and Heat and they take quizzes based both on the lab instructions and material from the lectures.

*Co-requisite: MATH-112, PHYS-201*

**PHYS-203 (Formerly S116) 3-0-3**  
**Physics II: Waves, Electricity, Magnetism and Light**

The mathematical representation of traveling sinusoidal waves and standing-wave patterns is emphasized. Applications are made to sound waves. Electrostatics include Gauss's law, electric potentials and the potential gradient equation. The field concepts are used to interpret elementary D.C. circuits including Kirchhoff's Rules. Capacitors as circuit elements and dielectrics are also studied. The effects of the magnetic field, its sources, induced EMFs and magnetic materials are considered. Series AC circuits conclude electromagnetism. Geometric optics includes lenses, mirrors and optical instruments. Physical optics includes interference and polarization of light waves.

*Prerequisites: PHYS-201 and PHYS-201L*

*Co-requisite: PHYS-203L*

**PHYS-203L (Formerly S116) 0-3-1**  
**Physics II Laboratory: Waves, Electricity, Magnetism and Light**

In this one-credit laboratory course students perform, analyze and submit lab reports based on experiments which test the theories developed in Physics II: Waves, Electricity, Magnetism and Light. They take quizzes based both on the lab instructions and material from the lectures.

*Co-requisite: PHYS-203*

*Prerequisites: PHYS-201 and PHYS-201L*

**PHYS-314 (Formerly S114) 3-0-3**  
**Elements of Quantum Mechanics**

The experimental background of quantum mechanics is reviewed before its postulates are introduced, and the theory is used to solve one-dimensional examples including the harmonic oscillator, then — in three dimensions — the hydrogen atom, electron spin and atomic spectra. Applications to chemistry are stressed.

*Prerequisites: MATH-225, PHYS-201*

**PRINT-101 (Formerly T938) 1-5-3**  
**Introduction to Print Design**

This course introduces the basic concepts and processes of analog and digital printing methods. Students will learn the hands on process of screen-printing as well as the technical process of large format digital printing. This class explores the use of printing as a vehicle for both creative expression and visual communication.

*Prerequisites: ADFND-102, DSGNFND 203 or INDD-102. This course is closed to all Textile Design majors.*

**PRINT-301 (Formerly T740) 1-5-3**  
**Printing Practices**

This course introduces production of printed textiles by hand-screen and digital fabric printing methods. Students will learn a technical process of color separations, screen making and printing in both digital and conventional (hands-on) modes. Integration of digital and hands-on printing are encouraged toward the end of the course. The main focus is placed on aesthetics of color and styling in textile design on fabric. Sketchbook study will be required to document design processes, ideas and drawings.

*Prerequisite: PRINT-303*

**PRINT-303 (Formerly T705) 1-5-3**  
**Print Design Studio I**

Techniques, materials, tools and basic information needed for the design on paper of printed fabrics for the apparel and home furnishing fields are studied. Hands on approaches with gouache and watercolor are used to prepare colorway and repeats. Students prepare a portfolio and learn to keep a sketchbook. A brief introduction to printing methods is included.

*Prerequisite: DRAW-303 Advanced Drawing: Materials & Techniques and VSDES-101 and Admission to the Textile Design Program or by permission of program director.*

**PRINT-305 (Formerly T745) 2-2-3**  
**Textile Printing Technology**

The theory and practice of all aspects of industrial printing techniques are presented in a lecture/demonstration/lab format. Cloth preparation and finishing, machinery, dyestuffs and various print styles are included. This course offers practical background knowledge to students with primary interest in textile design, styling, marketing, quality control and textile manufacturing.

**PRINT-315 (Formerly T706) 1-5-3**  
**Print Design Studio II**

This course focuses on creative use of CAD in surface patterning, which integrates with hands-on design applications that students acquired in PRINT-303 Print Design Studio I. Digital workflow, which includes scanning croquis, designing pattern on CAD, digital color matching and color ways will be introduced. At the same time, strong emphasis is placed on making croquis, which develop from drawings and paintings in the sketchbook. Students will create printed textile designs and patterns for Jacquard designs on paper with digital printers for apparel and home furnishing fields. Throughout the semester, sketchbook study will also be required to document the working process, as well as drawings and paintings.

*Prerequisite: A grade of "C" or better in PRINT-303*

**PRINT-331 (Formerly T707) 1-5-3**  
**Print Design Studio III**

Advanced course to give students further necessary experience in developing and producing creative designs for special markets, end uses and fabrics. Market research is required before projects are begun.

*Prerequisite: PRINT-315*

**PSYCH-101 (Formerly H801) 3-0-3**  
**Introduction to Psychology**

This course is an introduction to the methodology, concepts, principles and issues in the study of behavior. Topics to be covered include: the biological bases of behavior; sensory and perceptual processes; learning, memory and cognition; motivation and emotion; personality, psychopathology and psychological approaches to therapy; and social interactions. This course is a requirement for enrollment in all higher-level psychology courses.

**PSYCH-103 (Formerly H881) 3-0-3**  
**Physiological Psychology**

This course will expand upon the biological bases of behavior. An emphasis will be placed on the relationship between the brain and behavior. Topics will include synthesis of neurotransmitters, an introduction to drugs and behavior and neural substrates that underlie behaviors.

*Prerequisite: PSYCH-101*

**PSYCH-201 (Formerly H823) 3-0-3**  
**Abnormal Psychology**

Students will consider of the various classifications and symptomatology of psychopathological disorders — their origin, assessment, prognosis, treatment and prevention.

*Prerequisite: PSYCH-101*

**PSYCH-210 (Formerly H825) 3-0-3**  
**Forensic Psychology**



Students will examine the interplay between the disciplines of psychology and law. The course will examine the psychological and behavioral issues that impact the legal and criminal-justice systems, and how law and justice affect human behavior. Topics to be covered include crime and criminal behavior, victims, law enforcement, trials, witnesses, mental illness and criminal justice, corrections, family law, crime intervention and prevention.

*Prerequisite: PSYCH-101*

**PSYCH-211 (Formerly H861) 3-0-3**  
**Learning Theory**

Students will study the acquisition, activation, direction and retention of human and animal behavior. Topics to be covered include instincts, drive, conditioning and instrumental learning, human verbal learning and language learning and memory processes.

*Prerequisite: PSYCH-101*

**PSYCH-212 (Formerly H862) 3-0-3**  
**Cognitive Psychology**

Study of human thinking, memory, problem solving and the relationship between damage to the cortex and information processing. Empirical research and applied examples and demonstrations will be presented to address such topics as the content of memory, memory improvement, strategies and approaches for solving different kinds of problems, and pathologies and problems of thought.

*Prerequisite: PSYCH-101*

**PSYCH-213 (Formerly H870) 3-0-3**  
**Developmental Psychology**

Students will analyze the process of human development and change throughout the lifespan. Research on both humans and animals will be presented to promote understanding of human physical, social, emotional and cognitive development. Topics include prenatal and postnatal development, issues and theories of human development, genetic influences and personality and issues related to the aging process.

*Prerequisite: PSYCH-101*

**PSYCH-214 (Formerly H863) 3-0-3**  
**History and Systems in Psychology**

Students will study the historical development of significant psychological concepts, theories and systems. The focus and far-ranging content of this course serves to provide an overall synthesis of the major subfields of psychology.

*Prerequisite: PSYCH-101*

**PSYCH-220 (Formerly H812) 3-0-3**  
**Clinical Psychology**

This course will provide students with an opportunity to use current theories to address individuals with mental-health issues. Topics will include professional duties and skills of the clinical psychologist, treatment procedures and resources and the diagnosis and management of common psychological disorders. Emphasis will be placed on humanistic and behavioral theories of etiology, treatment and the enhancement of psychological well-being.

*Prerequisite: PSYCH-201*

**PSYCH-221 (Formerly H822) 3-0-3**  
**Personality Theory**

This course is a survey and comparative analysis of the major representative theories of personality, both traditional and contemporary. Special topics such as the effects of genetic predisposition, physical status and environmental factors on personality configurations will also be discussed.

*Prerequisite: PSYCH-101*

**PSYCH-222 (Formerly H824) 3-0-3**  
**Counseling Psychology: Theories and Principles**

This course provides an overview and general understanding of the field of counseling psychology. The course is designed to familiarize students with the basic concepts, interventions, scientific research, professional practices and contemporary issues of the profession of counseling psychology. Students will learn a variety of theoretical approaches and psychotherapy techniques to counseling, including psychoanalytic, behavioral, cognitive and humanistic approaches. The course contains both didactic and skill application to encourage competency in the performance of counseling skills.

*Prerequisite: PSYCH-201*

**PSYCH-223 (Formerly H826) 3-0-3**  
**Marriage and Family**

This course is a survey of family systems and theories underlying marriage and family counseling. The course will explore the history of marriage, the choosing of a partner, parenting styles, and issues that create marital discord and divorce. Specific course objectives are to provide information about the therapeutic process and the practical elements of counseling interactions with families, to identify differences between individual- and system-oriented therapies, and to encourage the integration of theoretical and experiential learning.

*Prerequisite: PSYCH-101*

**PSYCH-224 (Formerly H888) 3-0-3**  
**Psychology of Addiction**

This course is a survey of current psychological theories of the addiction process and treatment modalities based on each. Physiology and neurobiology will be considered, but are not the primary focus of the course. Theoretical models include: the disease model, psychoanalytic formulations, conditioning theory, social-learning theory, family-systems theory and the opponent-process model. Sociocultural perspectives, including deviance theory, will also be discussed.

*Prerequisite: PSYCH-101*

**PSYCH-230 (Formerly H831) 3-0-3**  
**Industrial Organizational Psychology**

Students will study the more recent methods in testing, interviewing and selection of workers. Training, motivation, performance appraisal, job satisfaction, morale, job analysis, decision making, leadership and organization theory are other topics discussed.

*Prerequisite: PSYCH-101*

**PSYCH-231 (Formerly H832) 3-0-3**  
**Psychological Assessment**

This is a methods course concerning the basic concepts and techniques of psychological assessment tools (tests) as they are used in the profession of psychology in employment, school, clinical and medical settings. Emphasis will be placed on understanding test design, or what goes into a test, as well as understanding test scores and profiles, or what comes out of a test. Many specific tests will be highlighted throughout the course to help students appreciate psychological tests and become aware of their functions and limitations.

*Prerequisite: PSYCH-101*

**PSYCH-232 (Formerly H851) 3-0-3**  
**Social Psychology**

Students will study the experimental analysis of the individual as subjected to the social influence of other individuals or social groups. Topics to be covered include persuasion, conformity, aggression, altruism, prejudice and interpersonal attraction and an analysis of the research methods used to study these behaviors.

*Prerequisite: PSYCH-101*

**PSYCH-233 (Formerly H853) 3-0-3**  
**Interpersonal Relations and Small Group Dynamics**

This course is designed to provide a theoretical and experiential exposure to group formation, group process and group dynamics, as well as to interpersonal relationships within and between groups.

*Prerequisite: PSYCH-101*

**PSYCH-240 (Formerly H880) 3-0-3**  
**Comparative Psychology**

This course will provide a survey of the study of animal behavior as related to psychology. Students will become familiar with approaches, fundamental concepts and contemporary research findings of the field. Topics include patterns and development of behavior in animals, neural and hormonal influences, animal learning and cognition and the evolution of behavior.

*Prerequisite: PSYCH-101*

**PSYCH-241 (Formerly H883) 3-0-3**  
**Psychopharmacology**

Students will study the basic principles of drug action in the central nervous system. Topics will include effects of stimulants, depressants, intoxicants and drug abuse on behavioral function. The clinical use of drugs in the treatment of psychological and psychiatric disorders will be discussed.

*Prerequisite: PSYCH-103*

**PSYCH-242 (Formerly H884) 3-0-3**  
**Sensations and Perceptions**

Sensations refer to information about the environment gathered through the senses. Perception is the process by which sensory information is interpreted and made meaningful. This course will provide a survey of the study of sensation and perception from structural, functional and cognitive viewpoints.

*Prerequisite: PSYCH-103*

**PSYCH-243 (Formerly H885) 3-0-3**  
**Human Sexuality**

This course involves a rigorous examination of the biological, behavioral and mental aspects of human sexuality. Among the topics to be studied are anatomy and physiology, conception and contraception, sex roles, love, sexual communication, sexual dysfunctions and social issues such as pornography.

*Prerequisite: PSYCH-101*

**PSYCH-322 (Formerly H804) 2-2-3**  
**Introduction to Experimental Psychology**

This course introduces psychology as an experimental science in which hypotheses are generated and tested. Major topics will include various types of experimental designs, subject selection and randomization. Students will be introduced to various data collection methods and research designs specific to the different branches of psychology.

*Prerequisite: STAT-321*

**PSYCH-371 (Formerly H896) 3-0-3**  
**Selected Topics in Psychology**

An in-depth consideration of a particular topic, issue or problem in psychology that is of special interest to students and faculty. Recent sections have discussed topics such as educational psychology, psychosexual development and the psychology of trauma. Topic selection will be done in advance of registration.

*Prerequisite: PSYCH-101*

**PSYCH-381 (Formerly H899) 0-0-3**  
**Independent Study in Psychology**

For further details, see general description of "Independent Study" in "University Academic Policies and Procedures: Common Academic Policies for All Students."

Permission required. See appropriate form online at the University Registrar's webpage [www.philau.edu/registrar/](http://www.philau.edu/registrar/) for more information.

**PSYCH-391 (Formerly H890) 2-2-3**  
**Advanced Research in Psychology**

*(writing intensive)*

This course will involve an in-depth exploration of research methods in psychology. Students will conduct an original research project individually or as part of a research team. Through this course, students will apply their psychological training to designing, conducting, analyzing, discussing and presenting their own research project.

*Prerequisites: PSYCH-322 and completion of at least 21 credits in psychology courses*

**PSYCH-410 (Formerly H805) 3-0-3**  
**Senior Colloquium in Psychology**

This course is a senior-level seminar dealing with current controversial issues in psychology. Students will perform a search of the scientific literature on issues chosen from a list provided by the instructor and organize, analyze, orally present and discuss material with the class. Finally, students will propose a question generated from this activity and design a research structure to answer it.

*Prerequisites: PSYCH-391*

**PUBH-101 3-0-3**

## **Introduction to Public Health**

This is the foundation course of the Public Health major and provides students with a general overview of principles of public health. The course explains and draws from the interdisciplinary focus of public health theory and practice. Presented will be the concepts of health, population health and the structure and activities of modern public health systems. The major determinants of health, the causes of disease and concepts of disease control and prevention are discussed.

**PUBH-201** **3-0-3**

### **Introduction to Epidemiology**

Epidemiology is the fundamental science of public health. This course presents basic principles of epidemiology including concepts of time, place and person in disease occurrence, disease causality, disease rates, sensitivity and specificity and epidemiologic data analysis. Reviewed are the applications of epidemiology to infectious and chronic diseases, occupation, the environment and health services delivery. Included are the basic types of observational and experimental studies as they relate to human diseases and key concepts in epidemiologic methods such as bias and confounding.

*Prerequisites: MATH-100 or 101 or 102 or 103 or 111*

**READ-099** **3-0-(3)**

### **Fundamentals of College Reading and Study Skills**

This course is designed to improve reading and study skills at the college level. Its main focus is on developing strategies that will be effective in other content courses. Students complete assignments in academic reading, note taking, vocabulary development, review techniques and critical reading skills.

Students must earn a “C” or better to receive credit for fundamentals courses. See “Fundamentals Courses” in the section “University Academic Policies and Procedures: Undergraduate Student Academic Policies.” Students required to take READ-099 must not register for HIST-11X in the same semester.

**READ-098ESL** **3-0-(3)**

### **ESL: Fundamentals of College Reading and Study Skills**

This course is designed for students who did not learn English as their first language. Its main focus is on developing effective academic reading strategies, expanding vocabulary and reading a wide variety of academic texts to help in preparing for the required reading in other content courses.

Students must earn a “C” or better to receive credit for fundamentals courses. See “Fundamentals Courses” in the section “University Academic Policies and Procedures: Undergraduate Student Academic Policies.” Students required to take READ-099ESL must not register for HIST-11X in the same semester.

**SCI-101 (Formerly L121)** **3-2-3**

### **Environmental Science**

Environmental Science is the study of how humans and the natural environment interact. Critical issues that affect our daily lives such as clean drinking water, urban renewal, energy availability, pesticides, global warming, acid rain and recycling are explored from social, ecological, chemical and political perspectives. Students will tackle a real-life environmental problem in a professional manner using critical thinking and analytical skills, library research skills, teamwork and presentation skills.

**SCI-102** **2-3-3**

### **Exploring Science**

*(for non-science majors)*

This hands-on science course delves into public health issues. Field and laboratory sessions focus on data analysis based on issues from students' daily lives which leads to an examination of alternatives. How do you quit smoking? What is in the water you drink and the food you eat? The course culminates in a project that explores the historical, political, and environmental aspects of an unsolved scientific problem and presents the findings to a regional scientific agency.

**SCI-106 (also listed as DECSYS-206) 3-0-3**  
**Biology for Design: From Biological Adaptation to Biomimetic Design**

The goal of this course is to increase the sophistication of design, engineering, business and other students regarding how design manifests itself in nature as biological adaptation, and to use that knowledge as a launching pad for thinking about biomimetic design. Biomimicry is a hot topic in architecture and design. Work in this field is usually done by designers working in collaboration with biologists who are highly specialized in a particular area, often plant or animal physiology. However, there are certain conceptual underpinnings pertaining to design and adaptation in nature that designers are often lacking that will prepare them for further exploration of this field. The course consists of two major units, the first focusing on the biology of adaptation from an evolutionary and ecological perspective. The second section consists of a survey of biomimetic design and how biomimicry has been employed to solve a range of design problems in architecture, materials science, systems design and technology. *(This course can be used to satisfy a College Studies Science requirement.)*

*Prerequisites: None*

**SCI-108 (also listed as DECSYS-208) 2-3-3**  
**Sustainability & Eco-Innovations**

The emerging fields of sustainability and environmental sciences will be surveyed to highlight how entrepreneurs are capitalizing on rapid environmental transformation. The rate, scale and degree of global environmental change, key scientific feedback loops the regional differences in terms of impacts and opportunities will be analyzed. Case studies of eco-innovation strategies employed by businesses and designers will be explored so that students can create their own scientific monitoring and evaluation plan for implementing a simple eco-innovation. *(This course can be used to satisfy a College Studies Science requirement.)*

**SCI-110 (Formerly Larch 105) 2-2-3**  
**Landscape Ecology**

Landscape Ecology combines the spatial approach of the landscape planner and designer with the functional approach of the ecologist. As a field it is an integrative and multidisciplinary science that combines geology, botany, zoology and human settlements at the "landscape" scale. For this course the focus will be various land use scales, i.e., the block, neighborhood, city, and region and how ecological processes function at each scale. Students learn the key principles of landscape ecology and then how to apply them to preservation, conservation, planning and the design process. *(This course can be used to satisfy a College Studies Science requirement.) Prerequisite: None.*

**SCI-202 (also listed as DECSYS-202) 3-0-3**  
**Materials Selection**

The materials available to meet design requirements for a specific application often limit performance in disciplines ranging from engineering and architecture, through industrial design, to fashion design and textiles. In fact, material selection is often the limiting performance factor in designing new products and processes. This course explores the governing principles of materials science, with a specific emphasis on using the scientific method to develop a "system approach" to materials selection at

various stages of the design process. *(This course can be used to satisfy a College Studies Science requirement.)*

**SCI-300** **3-0-3**  
**Basic Pharmacology**

This course introduces the student to the basic principles of pharmacology including pharmacokinetics and pharmacodynamics. The course will cover frequently prescribed medications, their uses, actions and common side effects. The student will learn about the various drug classification systems, as well as the effects of those drug classes on specific patient populations, and the process of preventing medication errors deriving from the use of pharmacologic agents.

*Prerequisites: BIOL-104 and BIOL-104L, CHEM-104 and CHEM-104L*

**SCI-381, SCI-382 (Formerly C281, C282)** **0-0-3, 0-0-3**  
**Independent Study I & II in Science**

Students interested in pursuing independent study in science must submit a proposal to the academic associate dean of undergraduate programs in the College of Science, Health and the Liberal Arts for approval at least two weeks before pre-registration. Detailed guidelines for development of the proposal may be obtained from the College. See "Independent Study" in "University Academic Policies and Procedures: Common Academic Policies for All Students."

*Permission required. Also see appropriate form online at the University Registrar's webpage <http://www.philau.edu/registrar/> for more information.*

**SCI-399 (Formerly STUAB-300, S464)** **1-6-4**  
**Selected Topics Study Abroad in Science**

International experience is invaluable in all scientific disciplines and strongly encouraged by the College of Science, Health and the Liberal Arts. Students will collect, analyze and present data in a scientific discipline both in the host country and to the Philadelphia University community. All students will have assignments and immersion in the cultural, social, environmental and historic foundations of the host country.

*Prerequisites: 2.50 G.P.A., completion of two required college studies science courses (SCI-101, SCI-102, BIOL-101, BIOL-103, CHEM-101, CHEM-103, PHYS-101 or PHYS-201) or permission of the instructor, and successful completion of the Study Abroad application and policy guidelines process. This course is eligible for an Honors upgrade.*

**SERVE-101** **0-1-1**  
**Civic Engagement: Serving and Learning in Philadelphia**

Through the completion of a 10-hour service project, online journaling, attending four class meetings, and participation in a service-learning showcase, students will serve the greater Philadelphia community in an area of interest and explore the reciprocal nature and responsibility of citizenship for the individual and community. This course may be taken in place of the two-course physical education requirement, and it may be taken an additional three times for free elective credits.

**SOC-201 (Formerly L362)** **3-0-3**  
**Class, Gender and Race in World Societies**



A study of theories, concepts and methods of social science, this course focuses on the nature of economic, racial and sexual stratification in the United States and around the world. The course is designed to enable one to understand and to be able to use social science to analyze and influence situations and environments.

*Prerequisite: WRTG-101, HIST-1XX*

**SOC-204 (Formerly L363) 3-0-3**  
**Personality and World Cultures**

This course is an introduction to the social sciences through the focused study of personality and culture. Material will illustrate quantitative and qualitative methods of social-science research. Students will explore concepts, theories and research representing psychological and anthropological approaches, using both classic and contemporary texts. Students will gain an appreciation of cross-cultural variability in personality.

*Prerequisite: WRTG-101, HIST-1XX*

**SOC-208 (Formerly L364) 3-0-3**  
**The Individual and the Global Environment**

This course will introduce students to the social sciences by focusing upon issues in the environment. By examining goals of the new environmentalism, by direct individual and community involvement and by understanding the present state of the world and future trends, the student will have the skills to prepare for a sustainable society, a society that satisfies its needs without jeopardizing the prospects of future generations.

*Prerequisite: WRTG-101, HIST-1XX*

**SOC-211 (Formerly L366) 3-0-3**  
**Power and Poverty in the Global Economy**

The course will emphasize the intersection between global political relations and global economics, and how the two together impact social relations worldwide. Various complementary and competing political and economic perspectives (from capitalist to socialist) will be used to address recent trends in the development of a global economy, international trade, the formation of regional blocs such as NAFTA and the EU, and north-south political/economic relations.

*Prerequisite: WRTG-101, HIST-1XX*

**SOC-225 (Formerly L367) 3-0-3**  
**Global Politics**

This course provides an overview of the forces that are shaping international politics and economics. This course will help students understand the roles of international institutions such as the United Nations, the World Trade Organization and the International Monetary Fund, as well as non-governmental actors such as Amnesty International and al Qaeda. Students will also examine the process of economic globalization in order to understand its varying impacts on different world regions.

*Prerequisites: WRTG-101, HIST-1XX*

**SPAN-101 (Formerly L342) 3-0-3**  
**Spanish I**

A beginner's course designed for students with very little or no knowledge of the language. The focus is on basic oral expression, listening comprehension and acquiring simple reading and writing skills, so that

students can gain confidence in the language and to begin to have conversations. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: none.*

**SPAN-201 (Formerly L642)                      3-0-3**

**Spanish II**

A beginner's course designed for students who have completed one semester of college-level language or the equivalent. The focus is on oral expression, listening comprehension and the acquisition of simple reading and writing skills, so that students can gain confidence in the language and conduct conversations and other social interactions in the language with some level of ease. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: Grade of "C" or better in (-101) or a minimum of two years of high school language study or permission of the instructor.*

**SPAN-202**

**Spanish for Healthcare Settings**

Spanish for Healthcare Settings is a second-semester course designed for students to gain conversational competence to communicate effectively at a basic level with Spanish-speaking patients in a medical setting. The course focuses on practical vocabulary, grammar, idiomatic expressions, medical terminology as well as developing students' oral communication skills. A main component of the class is the focus on cultural issues relevant to Spanish-speaking patients and particular health concerns relating to the Hispanic community in the U.S.

*Prerequisites: SPAN-101 or equivalent*

**SPAN-301 (Formerly L742)                      3-0-3**

**Spanish III**

A beginner's course designed for students who have completed two semesters of college-level language or the equivalent. The focus is on advancing oral expression, listening comprehension and the development of reading and writing skills, so that students can gain confidence and express themselves fluidly entirely in the target language. The course will also develop cultural understanding, a key element to language learning, through the analysis of authentic visual media, written materials and cross-cultural interactions.

*Prerequisite: grade of "C" or better in -201 or a minimum of three years of prior high school foreign language study or permission of the instructor.*

**SPAN-401 (Formerly L742, L842)      3-0-3**

**Spanish IV**

An intermediate course that provides students with the opportunity to communicate in a fluent and sophisticated manner. The focus is on expanding the knowledge of structures and vocabulary that students have acquired in levels I-III. In addition to constant attention to speaking, writing, listening and reading, more complex ways of expression are also emphasized. Contemporary culture is explored through authentic visual media and written materials.

*Prerequisite: Grade of "C" or better in -301 or a minimum of four years of high school language study or permission of the instructor.*

**STAT-201 (Formerly B151) 3-0-3**  
**Statistics I for Business**

Descriptive statistical measures and probability theory are combined to provide the basis for statistical decision-making techniques. Areas covered will include data presentation; measures of central tendency; measures of variability; basic probability laws, Bayes' theorem; binomial; Poisson; "t," and normal distributions; confidence intervals; and hypothesis testing.

*Prerequisite: Quantitative Reasoning I*

**STAT-202 (Formerly B152) 3-0-3**  
**Statistics II for Business**

Review of sampling distribution, confidence intervals and hypothesis tests for two-samples; simple linear regression, multiple linear regression with emphasis on computer output; one- and two-way analysis of variance; application of the Chi-square statistic; and non-parametric statistical techniques.

*Prerequisite: grade of "C" or better in STAT-201*

**STAT-221 (Formerly H802) 3-0-3**  
**Psychological Applications of Statistics I**

This course will present an introduction to descriptive statistics and the basis for statistical decision-making techniques. Methods for analyzing experimental data will be presented so students can gain an understanding of statistical procedures commonly used in psychological research. Topics to be covered include the presentation of data, probability, measures of central tendency and variability, correlation and an introduction to hypothesis testing.

*Prerequisite: PSYCH-101*

**STAT-301 (Formerly S466) 3-0-3**  
**Biostatistics**

This course will cover principles of experimental design and statistics for biologists in environmental and medical fields. Hypothesis testing; data collection and sampling; data analysis and graphing; univariate; bivariate and multivariate analysis including regression and ANOVA will be covered. Students will design an experiment and compare and contrast the results of several different statistical approaches to data analysis and interpretation.

*Prerequisite: grade of "C" or better in either MATH-111 or MATH-112*

**STAT-321 (Formerly H803) 3-0-3**  
**Psychological Applications of Statistics II**

This course will expand on fundamental topics covered in Psychological Applications of Statistics I and will cover advanced topics such as two-sample hypothesis testing, correlation, analysis of variance, regression and various non-parametric statistics. Particular emphasis will be placed on the interconnection between experimental design in psychology and statistical principles.

*Prerequisite: STAT-221*

**STUAB-300 (Formerly T100) 0-0-(3-12)**  
**Textile Studies Abroad**

Students have the opportunity to study in international textile schools. The School of Design and Engineering should be contacted for further information.

*Prerequisites: junior status, 2.50 G.P.A.*

**STUAB-300 (Formerly B100) 0-0-(4-6)**  
**International Business Studies Abroad**

International Business majors are required to study abroad an equivalent of four to six credit hours. The location must be consistent with the foreign language studies chosen. The study abroad may be in the form of an internship or studies at an international university or college. Students must apply for and coordinate their study abroad through the International Business coordinator. A minimum of six months is usually required between the application and the actual study abroad.

*Prerequisites: equivalent of semester-three language proficiency (Intermediate Low of the ACTFL proficiency standard) in a second language and permission of the International Business program coordinator.*

**STUAB-300 (Formerly A100) 0-0-(3-12)**  
**Architecture/Design Abroad**

Contact the College of Architecture and the Built Environment, or the Kanbar College of Design, Engineering and Commerce for further information.

*Prerequisites for Architecture: 2.00 G.P.A., grade of "C" or better in both ARCH-311 and ARCH-312; or grade of "C" or better in INTD-302, and permission of both the study abroad director and program director*

*Prerequisites for Design: DSGNFND-103, ADFND-101 or INDD-101 Cannot be taken as a replacement for WEAV-201.*

**STUAB-301 0-0-3**  
**Study Abroad Project Documentation**

This course will be a vehicle for students to analyze and document their study abroad experience and then share it with the university community. Similar to an independent study, students will be required to keep a journal while abroad. When they return, they will document their individual academic and personal experience as well as working on group projects to produce a public exhibition.

*Prerequisites: STUAB 300*

**SUST-100 3-0-3**  
**Introduction to Sustainability**

As the gateway to the Environmental Sustainability major, this course introduces students to the core concepts of sustainability theory and practice. Students will explore the ethical principles, social structures, technologies and political and economic processes necessary for humans to live sustainably in community with each other, other species and our natural environment.

**SUST-120 3-0-3**  
**Sustainable Food Chains**

This course examines one of the most fundamental sustainability challenges that we will face this century: how to feed 9-10 billion people without depleting the planet's soils, water supplies, oil resources and biodiversity. Sustainable Food Chains explores the environmental impact of modern industrial agriculture and examines alternative approaches to food production that reduce the use of non-renewable resources, respect natural processes and work in harmony with local ecosystems, communities and economies.

**SUST-121 3-0-3**  
**The Environment and World Cultures**

Global religions, cultures, and philosophies, both past and present, have interpreted the relationship between human society and the natural environment in a variety of ways. In this course students will study attitudes towards the environment, its protection, and sustainability through the lenses of several major religions and philosophies, and will compare how these worldviews offer differing perspectives on the role of “Nature” in everyday life.

**SUST-200** **3-0-3**  
**Energy Systems and Politics**

The rising international demand for fossil fuels, the increasing concerns about dwindling energy reserves and the growing evidence of climate change are combining to accelerate the search for alternative energy sources. This course will analyze the environmental, economic and political dynamics of the existing energy regime and help students evaluate the potential and drawbacks of possible energy alternatives.

*Prerequisites: HIST-1XX*

**SUST-202** **3-0-3**  
**Economics of Sustainability**

This course introduces students to general economic theory and how it can be applied to the analysis of sustainability issues. Topics include the economics of sustainable development, cost-benefit analysis related to environmental initiatives and the evaluation of policies for more sustainable production and consumption.

*Prerequisites: HIST-114*

**SUST-204** **3-0-3**  
**Sustainable Planning & Land Use**

This course examines land use and urban planning questions from the perspective of sustainability. Topics include “smart” growth/development, wilderness conservation, community activism, environmental justice, brownfield and grayfield redevelopment, greenfield preservation, zoning for mixed-use neighborhoods, mass transit planning, and transit-oriented development (TOD).

*Prerequisites: WRTG-101, HIST-1XX*

**SUST-300** **3-0-3**  
**Sustainable Technologies for Architecture**

This course provides students with the skills and vocabularies to converse and enhance their ability to collaborate with professionals. This course is intended as an introduction to sustainable architecture and its technologies that are typically used in practice.

*Prerequisite: SUST-204*

**SUST-302** **3-0-3**  
**Industrial Ecology**

Industrial Ecology is the study of how industrial processes affect the environment. Students will learn approaches and tools to evaluate products, processes and systems in their entire life-cycle, including: material flow analysis, design for environment, input-output analysis, life-cycle assessment, industrial symbiosis and sustainable consumption.

*Prerequisites: 2 courses from the Science Group and WRTG-21X*

**SUST-303** **3-0-3**

## **Global Environmental History**

*(writing intensive)*

Global Environmental History allows students to develop a historical perspective on the relationship between human societies and the natural environments that surround and support them. As this course illustrates, some societies have succeeded in living in balance with local ecosystems, and some have failed. By analyzing these historical examples, students learn how various cultural, economic and political factors can combine to produce an environmentally sustainable society or a catastrophic ecological collapse.

*Prerequisites: SOC-2XX*

### **SUST-400 3-0-3** **Sustainability and Development in the Non-Western World**

This course examines sustainability issues in such non-European nations as China, Mexico, Brazil and Ghana. It looks at how local economic and cultural factors help shape sustainability strategies and examines the relationship between economic development and sustainability in a comparative framework.

*Prerequisites: SOC-2XX*

### **SUST-402 3-0-3** **Managing Sustainable Organizations**

This course answers the question, “How can we effectively manage sustainability in organizations?” The course uses contemporary readings, research, cases, and student projects to explore current and future approaches to sustainability within the context of management and organizations both within and beyond the traditional management framework of planning, organizing, leading and controlling.

*Prerequisite: MGMT-301 or MGMT 104 (for DEC students only) and one Junior Seminar*

### **SUST-421 3-0-3** **Environmental Policy**

Environmental problems are essentially social, economic and political problems. This course traces the evolution of environmental policy, legislation, and regulations, both in the U.S. and worldwide, including the background and context of environmental policymaking. Students will also examine the substantive problems and political process of environmental movements, and contemporary environmental thought with regard to issues of sustainability and environmental justice.

*Prerequisites: SOC-2XX and one junior seminar.*

### **SUST-498 3-0-3** **Environmental Sustainability Capstone Seminar**

This capstone course for the Environmental Sustainability degree program uses case studies and a real-world project to review and integrate the skills and knowledge developed in the previous courses in the Environmental Sustainability curriculum. Applying the principles of systems thinking and other analytical tools, students solicit, develop, present, and implement a client-based sustainability initiative.

*Prerequisites: SUST-402*

### **TENGR-306 3-2-3** **Textile Engineering I (Linear Assemblies – Fibers & Yarns)**

The molecular structure and morphologies of fibers are explored. The physical, chemical and mechanical properties and behavior of fibers is studied. Fiber-production processes are reviewed. An examination of systems employed in conversion of fibers into textile structures is conducted. Relationships between material/process constraints and product functional quality are analyzed. The laboratory explores the methods of evaluating fiber and yarn properties.

*Prerequisites: PHYS-203 and CHEM-103*

**TENGR-308** **3-2-3**  
**Textile Engineering II (Planar Assemblies)**

Basic and complex designs. Multiple layer, tubular and near net shape structures. Use of dobby and Jacquard. Development and visualization of woven and knit fabric structures using CAD. Tensile, shear and bending characteristics of woven and knit fabrics. Effect of uniaxial and biaxial forces acting on fabrics. Effect of Poisson's ratio. Fabric drape and formation of double curvatures. Fabric surface characteristics.

*Prerequisite: TENGR-306*

**TENGR-310** **3-2-3**  
**Textile Engineering III: Nonwovens and Chemical Processing**

This lab-based course will focus on the production and evaluation of nonwoven fabrics, including web forming and bonding methods, and on coloration techniques, including dyeing and printing, as well as aesthetic and functional finishing.

*Prerequisites are: TENGR-308 and CHEM 103*

**TENGR-320** **3-2-3**  
**Textile Engineering IV: Advanced Fibrous Materials**

Mechanics and processes for producing functionally advanced fibrous materials. Architectural, aerospace, recreational and biomedical application of textiles. Concepts of advanced fiber composites will be covered.

*Prerequisite: TENGR-310*

**TEXT-101 (Formerly T101)** **3-1-3**  
**Survey of Textile Industry**

Introduction to the language and process flow of fibers through finished products. Topics include fiber classification, formation and variants; spun and filament yarn processing, numbering systems, texturing and novelty yarns; woven, knit and nonwoven fabric formation, processing equipment and basic design elements; printing, dyeing and finishing processes; product evaluation; as well as government legislation related to textiles. A laboratory experience provides support for the lectures.

**TEXT-104** **2-2-3**  
**Fiber and Yarn Studies**

This course introduces the basic knowledge of fiber and yarn technology. Included are the proper use of fiber/yarn terms and definitions, the construction parameters of the various fiber and yarn types and detailed analysis of performance properties of each. This information is then used in the proper selection of fibers and yarns for various fabrics and ultimately for various end use products in apparel, household and industrial applications.

**TEXT-113 (Formerly T301)** **4-2-4**  
**Yarn**



The processes necessary for the manufacture of continuous filament, staple, novelty, bulk and stretch yarns are studied. Staple yarn manufacture, including the processing of natural and man-made fibers on the carded cotton, combed cotton, woolen and worsted staple yarn manufacturing system is covered. Quality-control procedures are emphasized. The laboratory experience exposes the student to all aspects of fiber to yarn formation.

*Prerequisite: TEXT-101*

**TEXT-201 (Formerly T255) 2-2-3**  
**Textile Production I**

This course will focus on the following performance properties of textiles: strength, elongation, thermo-physiological comfort, sensorial-comfort body movement, aesthetic qualities, appearance, maintenance properties, and health/safety/protection properties. The process of achieving desired fabric properties through the use of appropriate fiber-, yarn- and fabric-production technology will be analyzed through theoretical studies and production laboratory exercises.

*Any student who has received credit for TEXT-113, WEAV-201, KNIT-201, and/or TEXT-321 may not take this course*

*Prerequisite: TEXT-101*

**TEXT-209 (Formerly T630) 3-0-3**  
**Industrial Textiles**

The study of the major industrial fabric applications, constructions and future trends. The performance requirements for each application will be related to the selection of industrial fibers, yarn and fabric constructions and fabric finishing, coating and laminating.

*Prerequisites: TEXT-307*

**TEXT-219 (Formerly T253) 3-0-3**  
**Textiles for Interiors and Architecture**

Focuses upon the unique problems and considerations of servicing the residential and contract textile-products market composed of upholstered furniture, window/wall coverings, carpets/rugs and furnishing accessories. Special textile requirements mandated by government agencies, building codes and industry-performance standards for residential, public and institutional interior spaces are emphasized.

*Prerequisite: TEXT-101*

**TEXT-301 (Formerly T256) 3-0-3**  
**Coloring & Finishing**

This lecture-based course will focus on coloration techniques, including dyeing and printing; as well as aesthetic and functional finishing. Any student who has previously received credit for PRINT-305 and/or TEXTCHM-242 may not take this course for credit.

*Fall only.*

*Prerequisite: CHEM-101 & TEXT-101*

**TEXT-305 (Formerly T207) 2-2-3**  
**Advanced Fabric Performance Evaluation**

The objective evaluation of fabric-mechanical properties influencing hand and performance are explored. Comfort-contributing qualities, such as thermal conductivity and air permeability, are also

addressed. The influence of fabric-mechanical properties on formability and seaming is assessed with special attention to their role in automated assembly.

*Prerequisite: TEXT-307 or TEXT-331*

**TEXT-307 (Formerly T201) 3-2-4**  
**Textile Materials**

The interrelationship of fiber selection, yarn processing, fabrication and finishing parameters is used to predict and measure fabric performance for specific end uses. A laboratory experience in textile product evaluation provides practical application of theory. The impact of textile-related government regulations is also emphasized.

*Prerequisite: TEXT-101 or TEXT-104*

**TEXT-313 (Formerly T763) 3-0-3**  
**Textile Costing**

The cost of materials, labor, overhead and waste is studied in relation to textile production and finishing. Case studies illustrate cost systems used in textile mills. Interrelationships between labor, machines and facilities are analyzed to determine their relative importance in cost-reduction programs. Costing factors for domestic and imported fabrics are considered.

*Prerequisites: WEAV-201, KNIT-201*

**TEXT-314 (Formerly T709) 0-0-3**  
**European Textile Printing**

A two-week study tour in the textile printing areas of France, Switzerland and Northern Italy introduces Textile Design and Textile Material Technology majors to the expertise of important European printers, screen engravers and studios in the areas of printed textile design, style, color and printing technology. Visits to the two important French historic textile museums and other related textile plants are also included.

*Prerequisite: PRINT-315 or PRINT-301 or PRINT-305 or permission of the program director*

**TEXT-315 (Formerly T208) 1-4-3**  
**Interior Fabric Performance**

Evaluations of fabrics and materials intended for end use in home furnishings are covered in this course. The use of physical testing to predict performance potential is emphasized. The use of instrumentations in the evaluation of surface and color change is presented.

*Prerequisite: TEXT-307*

**TEXT-316 (Formerly T767) 3-0-3**  
**Textile Quality Management**

Recently, quality has emerged as a formal management function — no longer restricted to manufacturing and operational areas, it now includes the design, purchasing and marketing processes. Through lecture, discussion and experientials, this course examines quality theory and practice — how a more sophisticated understanding of quality can lead to a strategic approach to quality management that is necessary to compete in today's global marketplace. Factors required for creating and maintaining a corporation's strategies and competitive edge are analyzed.

*Prerequisites: MGMT-301 or MGMT 104 (for DEC students only); and WEAV-301 or KNIT-205*

**TEXT-317 (Formerly T811) 3-0-3**

## **Textile Production Control**

Production — its measurement and control — is studied through plant and equipment layouts, as well as equipment selection. Methods of managing people and the equipment to optimize production are discussed.

*Prerequisites: WEAV-201, KNIT-201*

### **TEXT-321 (Formerly T620) 2-2-3** **Nonwovens**

The methods of web formation, bonding, end-use and market potential for nonwovens are investigated. In the laboratory, dry-laid and wet-laid nonwovens are manufactured and later evaluated in the testing laboratory for their unique characteristics.

*Prerequisite: TEXT-101*

### **TEXT-325 (Formerly T621) 2-2-3** **Fibrous Composite Materials**

Exploration of properties of various fibers and fibrous constructions as applied to composites; fabrication of fiber-reinforced composites; and analysis of properties of new materials and technology.

*Prerequisite: MATH-112, ENGR-215*

### **TEXT-331 (Formerly T240) 3-0-3** **Apparel Fabric Performance**

The course focuses upon the dependent relationship of the raw materials, manufacturing processes and finishing techniques that influence the actual performance of apparel products. This will enable students to evaluate a garment's suitability for a specific end use when any fabric variable is altered or when a product's construction and composition is examined. Federally mandated and voluntary labeling requirements will be emphasized. This course cannot be taken for credit by students who have taken TEXT-307.

*Prerequisite: TEXT-101*

### **TEXT-335 (Formerly T625) 1-4-3** **Nonwovens Fabrication and Design**

Experimentation in the methods of nonwoven web formation, bonding, end use and expanded market potential for nonwovens are investigated. In the design studio, students will conduct market research while concurrently developing design concepts through hands-on laboratory experience. Each student will create a collection of samples with a specified intention exercising knowledge of fiber and fabrication properties, aesthetic qualities and performance characteristics.

### **TEXT-371 (Formerly T890) 3-0-3** **Special Topics in Textiles**

A topic of special interest to students majoring in Textile Design, or Textile Engineering Technology. The special topic will vary.

*Prerequisites will vary.*

### **TEXT-381, TEXT-382 (Formerly T798, T799) 0-0-3** **Independent Study in Textiles I and II**

For details, see description of Independent Study in “University Academic Policies and Procedures: Common Academic Policies for All Students.”.

*Permission required. See appropriate form online at the University Registrar’s webpage <http://www.philau.edu/registrar/> for more information.*

**TEXT-391 (Formerly T295) 1-5-3**  
**Textile Design Research**

This course will focus on uses of various design resources such as museums, market information, color forecasts, trade shows, nature and current events to generate design ideas suitable for the student’s concentration area. Active research will result in a written and illustrated sketchbook of ideas to be used in advanced studio course projects, as well as portfolio-suitable drawings and paintings.

*Prerequisites: DRAW-303 and VSDES-101 and Admission to the Textile Design Program (TEXD.BS.DAY) or by permission of program director.*

**TEXT-411 (Formerly T790) 1-0-1**  
**Seminar: Textile/Apparel Industry Issues**

Seminars will expose students to diverse views, as well as enable them to discuss broad issues that cut across several disciplines. New technology and processes, business ethics, industry forecasting and marketing innovations, as well as career information, are effectively presented in this format. One credit of Textile/Apparel Industry Issues is required for TD, TET, FD and FIM majors.

**TEXT-487N (Formerly TEXT-487, T290) 4-0-6**  
**Textile Engineering Technology Senior Project**

*(writing intensive)*

Design, development, manufacturing, research and other thought-provoking problems are presented. Students will work in teams to analyze information/data on numerous textile- or apparel-related problems. The final project will reflect the work previously conducted in the TET Option and will constitute the final submission to each student’s digital portfolio.

*Prerequisite: WRTG-2XX, completion of 12 credits in TET Option*

**TEXT-489**  
**Textile Design Senior Seminar**

The capstone course for students within the Textile Design major during which the students will develop a professional portfolio in actual and digital formats and refine work for their final exhibition. Students’ individual interests will guide market research and the resultant development of targeted lists of potential employers. Resumes, cover letters and promotional packets will be developed during the course of the semester.

*Prerequisite: Senior status*

**TEXT-499 0-12-6**  
**Textile Design Capstone**

Students develop projects independently and are required to demonstrate ability and understanding of textile design theory, processes and principles. The final project requires topic research, design exploration, development and final professional presentation. Additionally, a resume, culminating portfolio and support materials will be developed.

*Prerequisites: pre or co-requisite of two Textile Design Designated Electives*

**TEXTCHM-242 (Formerly C501) 4-2-4**  
**Dyeing and Finishing**

*(writing intensive)*

This course presents an overview of the wet processing of fibers, yarns and fabrics. Included are the preparation, dyeing and finishing of textiles. Some emphasis is placed on the chemistry and technology involved in these operations. Dyes are studied by their method of application and the primary substrates to which they are applied. Chemical, thermal and mechanical processes are discussed for both preparation and finishing of fabrics.

*Prerequisite: CHEM-101 or CHEM 103, WRTG-101*

**TEXTCHM-338 (Formerly C116) 4-2-4**  
**Organic/Textile Chemistry**

Aliphatic, aromatic and heterocyclic compounds with emphasis on those syntheses and reactions that play a role in textile chemistry. Also includes the chemistry of carbohydrates and proteins, regenerated polymers, polymerization, synthetic polymers, the synthesis and chemistry of finishing agents and dyes. The laboratory portion illustrates basic techniques and reactions and the applications of textile chemistry.

*Prerequisite: CHEM 103*

**VSDS-101 1-5-3**  
**Visual Studies: Design**

This Foundations level design course confronts the process and principles of design. Students learn studio practices and gain facility to use a variety of materials in order to foster a hands-on creative experience. Design students in this course will develop sensitivity to value and color relationships with strategies for their use. Projects will be short in duration with a succession of increasingly complex concepts. The primary aspect of the course is two-dimensional design with a short period of three-dimensional study.

\*This course should not be taken by students who have received credit for Design I or Design II in the School of Design & Engineering or the College of Architecture and the Built Environment\*

**VSDRW-101 1-5-3**  
**Visual Studies: Drawing**

This drawing course emphasizes the understanding of space and alternative approaches for recording and expressing it. Much information in regard to drawing practice will be accumulated during this semester such as mark making skills, developing sensitivity to light and shade, experimentation with media and the use of color as an introduction to figure drawing.

\*This course should not be taken by students who have received credit for DRAW 101 or DRAW 201 in the School of Design & Engineering or the College of Architecture and the Built Environment.\*

**WEAV-201 (Formerly T451) 4-2-4**  
**Weave Technology I**

The structures and analysis of woven fabrics will be studied utilizing CAD, pick outs and laboratory assignments on industrial equipment. Weave structures will include plain, twills and satins (with their derivatives), color effects, textural effects (cords, etc.) and pile weaves. Fabric will be mathematically analyzed for weight, yarn size, fabric count and yarn crimp to specify fabric structure. Necessary loom

controls (draw, chains and reed plans) will be used to relate lectures and laboratory work on dobby looms.

Prerequisite: TEXT-101 or TEXT-104 and Admission to the Textile Design (TEXT.BS.DAY) or Textile Materials Technology (TMT.BS.DAY) Programs or by permission of program director.

**WEAV-207 (Formerly T440) 1-5-3**  
**Weave Design Studio I**

This course focuses on the effects and interactions that yarn, color, texture and structure play in woven design. Working with multi-harness floor looms, students create warps and chains, and weave prototype cloth for various end uses.

*Prerequisite: WEAV-207, KNIT-203 and TEXT-391*

**WEAV-226 (Formerly T420) 3-2-4**  
**Jacquard**

The principles and equipment involved in the design and production of Jacquard fabrics are studied. Students analyze, design and produce complex Jacquard fabrics on commercial equipment including computerized design and production systems.

*Prerequisite: WEAV-201*

**WEAV-301 (Formerly T452) 4-2-4**  
**Weave Technology II**

The variations, function, auxiliary devices and design characteristics of cam, dobby and Jacquard weaving machines, and the equipment used to support the weaving process are studied; along with relevant calculations regarding time, materials and production of fabrics. The technique required to accurately analyze fabrics for all critical components and methods to design fabrics for specific weight and compact cover, with consideration given to yarn size, texture, fiber type, weave and other fabric parameters, will be learned. Advanced multi-layer weaves will be studied, analyzed and woven.

*Prerequisite: WEAV-201*

**WEAV-307 (Formerly T441) 1-5-3**  
**Weave Design Studio II**

The study of elements of woven design is brought to the problems of multi-layered cloth, compound weaves, block designs and other advanced structures. Students use several CAD programs in conjunction with AVL compu-dobbies to increase their design capabilities. Multi-harness floor looms and dobby looms are also used to develop cloth from concept to actuality.

*Prerequisite: A grade of "C" or better in WEAV-207*

**WEAV-327 (Formerly T442) 1-5-3**  
**Weave Design Studio III**

Through an advanced study in woven-textile design, students develop a comprehensive working knowledge of the process of styling fabric for specific textile markets. Depending on the projects' parameters, students may use AVL compu-dobbies or multi-harness floor looms.

*Prerequisite: WEAV-307*

**WEAV-401 (Formerly T478) 1-5-3**  
**Introduction to Woven Design**

(for non-textile design majors)

This course focuses on the effects and interactions that yarn, color, texture and structure play in woven design, as they relate to a range of end use applications. Students will develop fabrics appropriate for their particular area of interest or major field of study. Using multi-harness looms, students will create and weave a variety of samples and prototype cloth.

**WRTG-100 (Formerly WRTG-099) 3-0-3**  
**Introduction to Academic Writing**

Writing 100 teaches writing in the context of reading and thinking about the diversity of American society. The course helps students to learn to write and write to learn. In learning to write, students learn to manipulate and negotiate the genres and conventions of academic discourse. In writing to learn, students develop process-based approaches to writing including invention, revision, and reflection. Students who pass this course with a C or better continue to Writing Seminar I.

**WRTG-101G (Formerly WRTG-100ESL, L111ESL) 3-2-3**  
**Writing Seminar I: Finding Philadelphia Global**

This course parallels WRTG-101, yet is specifically designed for students whose first language is not English. As does WRTG-101, this course includes reading and discussion about a variety of texts that share a common theme. Writing assignments include at least three expository essays and a library research paper related to the theme. To be placed in the course, students must either pass WRTG-098ESL or, after submitting a writing sample, be placed by a designated faculty member.

**WRTG-101 3-0-3**  
**Writing Seminar I: Finding Philadelphia**

This course is based on the idea that reading, writing and thinking within a specific context are crucial to successful college work. Students use writing to explore issues in contemporary Philadelphia's social and cultural contexts. Through reading, discussing and writing about full-length books and articles, students learn the rudiments of writing college-level academic papers. Honors and English as Second Language versions of this course are available.

**WRTG-211 (Formerly L611) 3-0-3**  
**Writing Seminar II: Business**

This course has been designed primarily for students of business. Students focus on critical reading, writing, thinking and researching in print, electronic, observation and interview formats. Students also consider economic, social and political perspectives as applied to workplace communication and their professions. Students produce individual and group projects, including oral and visual presentations, as they focus both on the process as well as the final products of their work.

*Prerequisites: WRTG-101, HIST-1XX. May not be taken CR/NC.*

**WRTG-215 (Formerly L612) 3-0-3**  
**Writing Seminar II: Design**

This course has been designed primarily for students of design. Students focus on critical reading, writing, thinking, and researching in print, electronic, observation and interview formats. Students also consider economic, social and political perspectives as applied to workplace communication and their professions. Formal aesthetic concerns are also addressed. Students produce individual and group

projects, including oral and visual presentations, as they focus both on the process as well as the final products of their work.

*Prerequisites: WRTG-101, HIST-1XX. May not be taken CR/NC.*

**WRTG-217 (Formerly L613)**

**3-0-3**

**Writing Seminar II: Science, Engineering, Technology and Health Professions**

This course has been designed primarily for students of science, engineering, technology, and the health professions. Students focus on critical reading, writing, thinking and researching in print, electronic, observation and interview formats. Students also consider economic, social and political perspectives as applied to workplace communication and their professions. Students produce individual and group projects, including oral and visual presentations, as they focus both on the process as well as the final products of their work.

*Prerequisite: WRTG-101, HIST-1XX. May not be taken CR/NC.*

## **Continuing and Professional Studies**

All Continuing and Professional Studies courses are available only in an accelerated format



**BEHLT-290** **3-0-3**

**Clinical Interactions in Behavioral Health**

This course builds on communication and clinical skills learned throughout other coursework and provides the student with a framework for the development of critical thinking skills and patient centered care perspectives within a variety of healthcare settings. Clinical reasoning skills such as patient triage, hierarchy of needs, short-term and long-term goal setting, and advanced assessment will be covered.

*Prerequisites: COMM 310 and PSYCH 233*

**BEHLT-341 (Formerly J605)** **3-0-3**

**Behavioral Health and Neurorehabilitation**

Focusing on the needs of clients and patients in specific environments, this course integrates behavioral and health sciences in the description of a range of interventions. Students will study specialized services used in the delivery of neuropsychology, rehabilitation nursing, occupational therapy and a variety of other fields.

**BEHLT-499 (Formerly J610)** **3-0-3**

**Applied Project in Behavioral Health and Neurorehabilitation**

Using the principles learned in CPS Core coursework, and/or applied psychology, neurorehabilitation, or behavioral health, this course requires students to design and develop a program directed toward addressing the health needs of an individual client/patient or group of individuals. Students are encouraged to apply their project to the future work environment where they plan to apply their expertise. Portfolio-based assessment allows students to demonstrate proficiency through display of artifacts related to their plan along with the presentation of documents that either assess the design of the project or describe project implementation.

*Prerequisite: CPS Core coursework*

**BIOL-202ACC** **3-0-3**

**Human Anatomy and Physiology II**

This course is the second of a two semester sequence. This course will examine anatomical and physiological aspects of the following systems of humans: sensory, endocrine, circulation, respiration, nutrition-digestion, excretion and reproductive. During lecture, both anatomy and physiology will be discussed. While some lab sessions will focus mainly on the anatomy of the current system, most laboratory sessions will involve physiological experiments to provide students with greater insight into the physiology of the current system. A close correlation between lecture and laboratory topics will be maintained.

*Co-requisite: BIOL-202LACC*

*Prerequisites: BIOL-201 Minimum Grade of C-*

**BIOL-202LACC** **0-2-1**

**Human Anatomy and Physiology II Laboratory**

The A&P laboratory sessions will provide students with hands-on learning opportunities to help conceptualize content discussed in lecture. During lab, students will work on problem sets, examine and dissect organs and/or anatomical models, use microscopes, perform basic physiological experiments and examine cadaver specimens. While some lab sessions will focus mainly on the anatomy of the current

system, most laboratory sessions will involve physiological experiments to provide students with greater insight into the physiology of the current system.

*Co-requisite: BIOL-202ACC.*

*Prerequisites: BIOL 201L Minimum Grade of C-*

**BUS-499 (Formerly J525) 3-0-3**  
**Business Capstone Seminar**

The process and techniques of strategy formulation, implementation and evaluation are studied and applied. Case studies of domestic and international companies and not-for-profit organizations will be used to integrate strategic management concepts with knowledge acquired in other classes. This course will include extensive written individual and team assignments and oral presentations.

*Prerequisites: MGMT-401, MKTG-102, ACCT-101 and ACCT-102*

**COMM-310 (Formerly J204) 3-0-3**  
**Communication Theory and Practice**

This course is designed to provide viable frameworks in communication and organizational theories and dynamics. Diagnostic criteria and delivery techniques will also be explored, within both theoretical and pragmatic realms. The class will be conducted in an interactive seminar format.

**COMM-320 (Formerly J204) 3-0-3**  
**Professional Communication Skills**

This General Education Core course requires students to analyze, produce, and revise professional communication in a variety of written, oral, and multi-model formats. Students produce individual and group projects in print and multimedia settings as they explore how economic, social and political perspectives apply to workplace communications, the professions and the professionals themselves.

**CSSEM-300 (Formerly J100) 3-0-3**  
**Professional Practice Seminar**

The introductory core course in Continuing and Professional Studies Bachelor of Science Accelerated Degree Completion Program. Course draws on a variety of sources to provide students the opportunity to create their own conceptual framework regarding their professional and personal experiences and understand how to integrate those frameworks into a personal plan for learning. Students are introduced to the requirements of the Continuing and Professional Studies Portfolio and create the first draft of their personalized portfolio. Required of all CPS majors.

*Prerequisite: Admission to CPS Accelerated Baccalaureate Degree Completion program*

**CSSEM-499 (Formerly J210) 3-0-3**  
**Professional Studies Capstone Seminar**

This General Education Core course examines emerging global issues in the areas of politics, economics, technology and the environment; and explores intercultural communication and the cultural dimensions of international business. Students present their final Continuing and Professional Studies Portfolios and analyze a relevant global trend and its expected impact upon their professional field. Required of all CPS Accelerated Bachelor of Science Degree Completion students.

*Prerequisites: Completion of all General Education and Continuing and Professional Studies Core courses, completion of at least 3 electives and completion of at least 3 courses in the major area of study*

**ECON-331 (Formerly J111) 3-0-3**

## **Economic Decision Making**

This Continuing and Professional Studies Core course introduces principles underlying the behavior of business firms, resource owners, and consumers within a system of markets. The theory of value and distribution and the implications of international trade on both value and distribution are addressed. Overall purpose of the course is to introduce many of the factors underlying sound economic decision making in the rapidly emerging global economy. There is a strong course focus on critical analysis of cases.

### **EMS-310** **3-0-3** **Emergency Services Law**

This course explores the essential framework of federal, state and local laws that impact on emergency and public safety services. It will provide an overview of the most important federal and state legislation that impact emergency services management and disasters.

### **EMS-320** **3-0-3** **Emergency Management Planning**

Topics covered in this course include: program planning and management, financial planning, managing information, leadership and followership styles, decision making skills, community building skills, intergovernmental relationships, negotiating and communication skills and professionalism.

### **EMS-330** **3-0-3** **Public Health Issues Impacting Emergency Services**

This course explores the relationship of public health and emergency and disaster prevention, response and recovery environments. Discussions examine the changing and unique role of public health in emergency management paying special attention to epidemiology, integration with traditional emergency services, medical and first responders, public safety, bioterrorism preparedness, and the need for comprehensive pre-education of professional and public communities. The class will cultivate insight into the necessary integration of public health in the development of effective emergency response contingencies specific to natural, accidental and international disaster events.

### **EMS-410** **3-0-3** **Disaster Response and Recovery Planning**

A pro-active rather than re-active approach to disaster preparedness is the best means of mitigating damage from natural disasters or other forms of destruction. This course covers systematic planning efforts for when disaster emergencies occur. Whether small scale or catastrophic, they can be overwhelming. Information in this course provides guidance on business continuity planning and recovery.

### **EMS-499** **3-0-3** **Theoretical Applications and Applied Project in Emergency Services Leadership**

Students will explore the relevant scholarly literature and then conduct an in-depth analysis of the emergency services industry and design an innovative project. Knowledge of statistical analysis, process planning, and data gathering will be used to complete their analysis and report on a contemporary topic or aspect of the business. Students will demonstrate their ability to assess the efficacy of program design as well as describe the project planning and implementation processes. Student projects are evaluated based on the capacity to incorporate familiarity with systems and planning in a comprehensive project in the context of their subject.

*Prerequisites: STAT-311, EMS-310, EMS-320, EMS-330, EMS-410*

**FINC-323 (Formerly J121) 3-0-3**  
**Financial Decision-Making**

A Continuing and Professional Studies Core course that examines financial decision making both from the corporate and individual points of view. While the emphasis is primarily on the corporation, discussions and analysis will be extended, where appropriate, to the individual.

*Prerequisite: STAT-311*

**HIST-232 3-0-3**  
**History and Philosophy of OTA Practice**

The history of the OT profession will be described, including founding principles, key figures in the development of the profession, including the founders of OT in the United States and the history of the practice of OT throughout the United States beginning with the Reconstruction Aides. Key dates, events and philosophical underpinnings will be outlined, particularly the move from holism through the rehabilitation movement following World War II and the effect of technology on practice in the US. The OT Practice Framework 2 will be introduced.

*Prerequisite: WRTG-105*

**HIST-321 (Formerly J201) 3-0-3**  
**Business, Industry and Work in American History**

This General Education Core course surveys major themes in the history of work in America, focusing on how economic, technological and political changes have transformed the nature of work in America. Course readings explore industrialization, the emergence of mass production and modern management, the history of worker organizations, the decline of manufacturing and rise of a service economy, and the impact of globalization on work in America. Throughout the course, students consider connections between changes in the workplace and broader social and political developments, including changing gender roles and the civil rights movement.

**HLTSV-210 (Formerly J125) 3-0-3**  
**Ethical Issues for Health and Human Services Providers**

This seminar style course is intended to provide tools necessary for considering and discussing ethical dilemmas in today's multicultural society. Meaningful dialogue requires an understanding of the evolution and development of ethics from the beginning of civilization. Sources used for this course include films and directed readings (text, newspaper articles, and internet resources). The goal of this course is to enhance the understanding and language skills of the provided so that he/she can engage in meaningful discussions of potentially highly charged emotional issues.

*Prerequisite: WRTG-101 or WRTG-105*

**HLTSV-310 (Formerly J301) 3-0-3**  
**Survey of Health Services Delivery Systems**

This course provides an overview of the history, evolution and major components of U.S. health care systems. Topics covered include the organization of health care services, the hospital, the roles of health care providers, supply and demand in health care, third-party payers, the role of government and managed care and comparisons of health care systems in other countries.

**HLTSV-315 (Formerly J302) 3-0-3**  
**Public Policy and Planning in Healthcare**

An analysis of the processes related to the planning, organizing, staffing, directing and controlling of health care services. Specific emphasis is given to the key indicators and organizations that drive policy and planning in health care systems. The course also considers the impact of policy on practitioners in health care. The techniques of effective decision making and problem solving are also addressed.

**HLTSV-325 (Formerly J303) 3-0-3**  
**Emerging Issues in Healthcare**

This course explores the current trends in health care and issues affecting the organizational changes in the industry with regard to delivery of health care services in a wide variety of settings. Topics include history of U.S. health care services, current reform proposals, universal health care insurance, ethical issues, gerontological issues, labor relations, the changing workforce in healthcare and comparative perspectives of health care in other countries.

**HLTSV-499 (Formerly J310) 3-0-3**  
**Capstone Seminar in Health Services Management**

Students use knowledge of statistical analysis, process planning, and data gathering to complete an in-depth analysis and report on a sector or organization in the health care industry. Students' projects are evaluated based on demonstration of an understanding of systems, planning and dynamics of delivery in the context of their project.

*Prerequisites: HRM-350, HLTSV-310, HLTSV-315 and  
HLTSV-325*

**HRM-321 (Formerly J401) 3-0-3**  
**Staffing and Resource Development**

This course focuses on the recruitment and retention functions of human resource management, including EEO/Affirmative Action and career planning. In addition, the course focuses on the training and development functions inherent in retaining and enhancing a skilled work force. Training development includes needs analysis, programming and evaluation.

*Prerequisite: MGMT-320*

**HRM-336 (Formerly J402) 3-0-3**  
**Compensation, Benefits, and Health and Safety**

Focusing on the complex structure of employee benefits programs, this course also introduces students to compensation structures. In addition to the focus on compensation and benefits, the course also develops students' understanding of the legal and organizational aspects of health, safety and security.

*Prerequisite: MGMT-320*

**HRM-350 (Formerly J132) 3-0-3**  
**Cross-Cultural Communication and Diversity Management**

This course will examine how to manage the growing multicultural workforce in the United States. Topics include issues of intercultural communication and cross-cultural relations, ethnocentrism, racism and ageism. Students will develop an understanding and appreciation for cultures other than one's own and will be able to discuss current techniques used in cultural analysis.

**HRM-421 (Formerly J403) 3-0-3**  
**Organizational and Employee Relations**

This course focuses in part on the function of union representation and collective bargaining in managing a large organization. In addition, it focuses on the role of planning, control, and information resources in the practice of human resource professionals.

*Prerequisite: MGMT-320*

**HRM-499 (Formerly J410) 3-0-3**  
**Applied Research and Practice in Human Resource Management**

This project-centered course requires students to develop a comprehensive human resource plan for an organization. Plans must include considerations of planning, staff development, compensation and benefit structures, and organizational health and safety requirements. Students will write and present a comprehensive plan, including materials targeted for employee development and relations.

*Prerequisites: HRM-321, HRM-336 and HRM-421*

**HUMN-301 3-0-3**

Art and Context

An in-depth examination of images and objects from throughout history and world cultures. Emphasis will be on the materials and techniques of painting, sculpture, architecture and landscape architecture, and on what these objects and images say about the cultures that made and make them. Class format will be lecture, class discussions and student group presentations. Two self-guided Philadelphia-area field trips will be required.

**HUMN-310 (Formerly J202) 3-0-3**  
**Globalization and World Politics**

This course provides an overview of the forces which are shaping global economics and politics. Students will develop an understanding of the roles of international institutions such as the World Trade Organization, the International Monetary Fund and the United Nations, as well as non-governmental groups. Students will also examine the process of economic globalization in order to understand its varying impacts on different world regions.

**IT-101 (Formerly J114) 3-0-3**  
**Introduction to Information Systems**

This is an introductory course in Continuing and Professional Studies for students with no prior computer experience. The course is designed to teach students to use informatics that combine computer science, information processing, data-base management, word processing, spreadsheets and information presentation skills to facilitate management and processing of industry-related data.

**IT-201 3-0-3**  
**Learning with Technology**

This course will utilize students' previously acquired abilities to use Microsoft Word, Excel and PowerPoint in conjunction with information retrieval, management and communication tools. Research methods are combined with resource use, leading to careful evaluation and ethical use of information. This course will be taught in a computer lab, combining lecture with hands-on activities and group work. Can complement courses in which the student is concurrently enrolled and that require research beyond the course's texts.

**IT-315 (Formerly J501) 3-0-3**  
**Information Technology I**

This course prepares future managers to be effective organizers and users of modern information technologies. Emphasizing a global perspective of information technology and related business issues, students learn to view IT in broad terms and function as “internal consultants” to functional areas in an organization. The course covers office and manufacturing automation, telecommunications, decision-support systems and executive information systems. Students learn to integrate the informational needs of the organization with suppliers, customers and other decision-making entities. Course introduces management techniques to support effective employees whose actions are guided by the power of modern information technologies.

**IT-317 (J502) 3-0-3**  
**Information Technology II**

This course introduces the fundamentals of computer-application development. Students will develop basic facility in digital media, electronic publishing, and decision support systems. The course also includes the use of information technologies for the automation of both office and factory environments.

*Prerequisite: IT-315*

**IT-320 (Formerly J503) 3-0-3**  
**Database Management**

This course will provide an introduction to the creation and management of electronic databases. Topics covered include database design, relationships, normal forms, structured query language, importing data and creating reports and forms. Data-modeling techniques will also be covered.

*Prerequisite: IT-317*

**IT-410 (Formerly J505) 3-0-3**  
**Needs Assessment**

This course provides an introduction to assessing the informational needs of an organization. Topics covered include equipment requirements, information design and technology integration as they impact the needs of an organization. Special attention will be given to usability studies and design development.

*Prerequisite: IT-320*

**IT-499 (Formerly J510) 3-0-3**  
**Project Management**

This course focuses on strategic management of technology projects. Acting as a project manager, students learn techniques to elicit the support and acceptance of new technologies within organizations. Through the creation of a project plan, students learn how to integrate informational technologies into an organization’s mission.

*Prerequisite: IT-410*

**LAWEN-301 3-0-3**  
**Planning for Law Enforcement Organizations**

This course covers strategic and tactical planning broadly conceived. The focus is on law enforcement, however theories, examples and perspectives will be drawn from other fields in the nonprofit sector. Topics to be addressed include forecasting, personnel planning, GIS, and personnel and resource management issues including budgeting and program evaluation.

**LAWEN-310 3-0-3**

## **Contemporary Law Enforcement Strategies**

Understanding that law enforcement professional must attain an in-depth understanding of contemporary policing strategies and critical issues face law enforcement today, students will examine crime analysis, patrol techniques, training, information systems/GIS as well as other issues such as government relations and criminology.

**LAWEN-410** **3-0-3**

### **Advanced Law Enforcement Theory and Management**

This course focuses on the underlying theories of expert practices in police management and administration. Students will examine ethical issues specific to the field of law enforcement. This course builds on knowledge obtained through LAWEN-310 and utilizes academic and professional literature to address critical issues in the field.

*Prerequisite: LAWEN-310*

**LAWEN-499** **3-0-3**

### **Capstone Seminar and Applied Project in Law Enforcement Leadership**

Using concepts learned in CPS Core Coursework and Law Enforcement Leadership courses, students conduct an in-depth analysis of the law enforcement industry and design an innovative law enforcement initiative. Students will use knowledge of statistical analysis, process planning and data gathering to complete their analysis and report on a sector or organization in the industry. Students will demonstrate their ability to assess the efficacy of a program design as well as describe the project planning and implementation processes. Students' projects will be evaluated based on the capacity to incorporate familiarity with systems and planning in a comprehensive project analyzing the dynamics of the law enforcement industry in the context of their project.

*Prerequisites: LAWEN-301, LAWEN-310, LAWEN-410, MGMT-320*

**LHS-350**

### **Fundamentals of Homeland Defense and Security 3-0-3**

Overview of the homeland security situation in the post-9/11 era. Students will develop an understanding of factors that affect government efforts to prevent terrorist attacks in the U.S. including terrorist groups, both domestically and globally, organizations involved in Homeland Security, and the challenges and legal issues facing homeland security professionals. Students gain a basic understanding of homeland security principles, national security, and its importance in securing our borders.

**LHS-360**

### **Unconventional Conflict** **3-0-3**

This course provides an introduction and examination of terrorist threats to the United States in the form of unconventional conflict, sabotage, and subversion. Discussions explore the character and history of these threats, as well as examine the operational and organizational dynamics of terrorism. Individuals, group cells, and large organizations that are engaged in clandestine activity for political purpose or effect are explored. Effective measures for both countering and responding to these terrorism threats are discussed.

**LHS-403** **3-0-3**

### **Critical Infrastructure: Vulnerability Analysis and Protection**

This course provides an introduction to the wide variety of threats to critical infrastructure sites and facilities in the United States from both terrorist activities and natural disasters.



The importance of these sites to the nation's overall safety and security is examined, with Local, State, and National icons highlighted. The Department of Homeland Security and its concept of an "All Hazards" approach to disasters is explored, with focus on the core principles of Prevent, Prepare, Respond, and Recover.

**MATH-215**

**3-0-3**

**College Algebra**

This course is designed for undergraduate students enrolled in Continuing and Professional Studies programs. Heavy emphasis will be placed on applications and mathematical modeling. Topics covered include those in a traditional College Algebra course. Students will gain knowledge and skills in problem solving and modeling using graphing calculators and computer software.

**MGMT-330 (Formerly J123)**  
**Organizational Ethics**

**3-0-3**

This Continuing and Professional Studies Core course deals with current controversial issues in organizational ethics. The course will be conducted as a seminar. Students will research specific topics and present this information to other seminar members.

**MGMT-361**

**Leadership Theory and Ethical Practices 3-0-3**

This course will heighten awareness and broaden the participant's knowledge of leadership theory, trends and applications, with a strong focus on ethical leadership. The course encompasses leadership/management theories, techniques, organizational applications, managing ethical gray areas with integrity, and integrating leadership skills into daily work practices. Students will review organizational structure/functions, leadership styles, managerial processes, strategic planning, and change-oriented ethical leadership and consider the impact of public policy.

**MKTG-320 (Formerly J122)**

**3-0-3**

**Visual Literacy**

A survey course in which students will examine, appreciate and communicate with visual media. Students will enhance their capacity to look at a design and evaluate what is effective, with an understanding of design language and the process by which good communication is created.

**OTA-300**

**4-4-6**

**Anatomy, Physiology and Biomechanics**

This course will examine the anatomical and physiological aspects of the various systems of humans, including integumentary, neurologic, sensory, musculoskeletal, reproductive, circulation, respiration, nutrition-digestion, excretion and endocrine. Biomechanics of muscles, bones, and ligaments of the human body and the interactions between these structures to illustrate how movements are performed will be addressed. Students will be introduced to strategies for adaptation that can lead to improved function in relevant contexts. The OT Practice Framework 2 terminology will be used to describe daily life problem solutions. A close correlation between lecture and laboratory topics will be maintained.

*Prerequisite: BIOL-101*

**OTA-302**

**3-2-3**

**Occupations Across the Lifespan: Infancy Through Adolescence**

The course will focus on the observations, analysis, and performance of human occupations in work, self-care and play/leisure from infancy through adolescence. The teaching-learning process will be incorporated, with an emphasis on self-directed learning by doing. The OT Practice Framework 2 terminology will be used to describe observations and findings. This course includes a graded offsite fieldwork component to complement academic teaching content.

*Prerequisite: HIST-232*

**OTA-304**

**3-2-3**

**Occupations Across the Lifespan: Adulthood**

The course will focus on the observations, analysis, and performance of human occupations in work, self-care and play/leisure from late adolescence through the elder years. The teaching-learning process

will be incorporated, with an emphasis on self-directed learning by doing. The OT Practice Framework 2 terminology will be used to describe observations and findings.

*Prerequisite: OTA-302*

**OTA-306** **3-2-3**  
**Conditions I: Infancy through Adolescence**

The etiology and symptoms of clinical conditions that are commonly referred for occupational therapy services are examined. The effects of trauma and disease on the biological, psychological, and social domains of occupational behavior are introduced, with particular emphasis on conditions usually experienced from infancy through adolescence. Procedures and precautions ensuring safety for patients and caregivers will be reviewed.

*Prerequisites: PSYCH-101 Introduction to Psychology*

*OTA-300 Anatomy, Physiology and Biomechanics*

**OTA-308** **3-1-3**  
**Conditions II: Adulthood**

The etiology and symptoms of clinical conditions that are commonly referred for occupational therapy services are examined. The effects of trauma and disease on the biological, psychological, and social domains of occupational behavior are introduced, with particular emphasis on conditions usually experienced from early adulthood through aging. Procedures and precautions ensuring safety for patients and caregivers will be reviewed. Students will be introduced to the resources available for keeping current as new protocols and best practices develop.

*Prerequisites: OTA-306 Conditions I: Infancy through Adolescence*

**OTA-310** **3-0-3**  
**Environments and Contexts of Occupation**

Environments and contexts can have an enormous effect on occupational therapy intervention. Across all practice areas, occupational therapy intervention uses environments and contexts to support the client's/patient's health and participation in meaningful occupations. This course focuses on understanding the complex nature of contexts and environments and their impact on engagement in occupations across the life span.

*Prerequisites: OTA 304: Occupations Across the Lifespan-Adulthood*

**OTA-400** **3-0-3**  
**Leadership and Human Service Systems**

Basic management skills and abilities required as a COTA in occupational therapy and other programs will be defined and analyzed. The student will explore topics associated with health care delivery systems, including contextual factors, federal and state regulations, reimbursement systems, and credentialing laws. Skills in management will be reviewed, including organizing and maintaining workload, marketing services, documentation in its various forms, and supervision of aides and developing skills as a fieldwork educator. Ethical and professional principles will be defined in the context of a variety of employment and intervention settings, with an emphasis on applying AOTA's Code of Ethics to different situations.

*Prerequisite: HIST 232 History and Philosophy of OTA Practice*

**OTA-402** **2-0-2**  
**Ethics and Critical Thinking I**

Students will examine the AOTA Code of Ethics in-depth and then use it and the AOTA Occupational Therapy Practice Framework 2 to analyze case studies and examples from fieldwork to further their understanding of liability issues, ethical dilemmas, and decision-making in professional interactions, client interventions, and employment settings.

*Pre-requisite: Ethics and Critical Thinking I*

*Co-Prerequisite: Fieldwork II A*

**OTA-404** **1-0-1**  
**Ethics and Critical Thinking II**

Clinical reasoning, ethical principles, and understanding the values of the profession are defined. The student will discuss and describe the value of local, state, and national professional OT organizations, the importance of promoting the profession and developing a personal professional development plan, and recognizing personal strengths and areas for improvement. Students will demonstrate their critical thinking and overall knowledge acquisition by presenting their summative OTA Program Portfolio in conjunction with this course.

*Pre-requisite: Ethics and Critical Thinking I*

*Co-Prerequisite: Fieldwork II B*

**OTA-406** **2-6-6**  
**Fieldwork Level II A**

Minimum eight weeks and 300 hours supervised experience. Students apply and integrate didactic knowledge and skills with clients in a variety of settings under the supervision of a registered and licensed occupational therapist. Students are assigned to facility and community settings and receive practical experience applying knowledge and skills with individuals of varying ages and conditions. Prior to enrolling, students must successfully complete all required OTA courses, demonstrate current CPR certification, and receive departmental approval.

*Pre-requisites: IT 201, OTA 310, MATH 215, OTA 400, OTA 414 – Interventions III: Late Adulthood.*

*Co-Prerequisite: OTA 402 Ethics and Critical Thinking I*

**OTA-408** **2-6-6**  
**Fieldwork Level II B**

Minimum eight weeks and 300 hours supervised experience. Students apply and integrate didactic knowledge and skills with clients in a variety of settings under the supervision of a registered and licensed occupational therapist. Students are assigned to facility and community settings and receive practical experience applying knowledge and skills with individuals of varying ages and conditions. Prior to enrolling, students must successfully complete all required OTA courses, demonstrate current CPR certification, and receive departmental approval.

*Pre-requisite: OTA-406 Fieldwork II A*

*Co-Prerequisite: OTA 404 Ethics and Critical Thinking II*

**OTA-410** **3-3-4**  
**Interventions I: Infancy through Adolescence**

Through analysis and simulation of occupations, OTA students gain insight and skill in observation, assessment, documentation, and teaching of adapted self-care, work and play/leisure activities for the person with life challenges from infancy through adolescence. Conditions commonly occurring in this age group will be reviewed. The dynamics of group and individual participation in occupations are explored as they relate to assessment and therapeutic intervention.

*Pre-requisite: OTA-302 Occupations across the Lifespan I: Infancy through Adolescence and OTA-306 Conditions I: Infancy through Adolescence.*

**OTA-412** **3-3-4**  
**Interventions II: Young through Middle Adulthood**

Through analysis and simulation of occupations, students gain insight and skill in observation, assessment, documentation, and teaching of adapted self-care, work and play/leisure activities for the person with life challenges from young through middle adulthood. Conditions commonly occurring in this age group are reviewed. The course includes laboratory and directed offsite fieldwork components to complement lecture content.

*Pre-requisite: OTA 410 Interventions I: Infancy through Adolescence; OTA 304 Occupations Across the Lifespan II: Adulthood; OTA 308 Conditions II: Adulthood*

**OTA-414** **3-3-4**  
**Interventions III: Late Adulthood**

Through analysis and simulation of occupations, the students gain insight and skills in observation, assessment, documentation, and teaching of adaptive self care, work, and play/leisure activities for the person with life challenges in late adulthood. Conditions commonly occurring in this age group will be reviewed. This course includes laboratory and directed offsite fieldwork components to complement lecture content.

*Pre-requisite: OTA-412 Interventions II: Young through Middle Adulthood*

**PSYCH-222ACC** **3-0-3**  
**Counseling Psychology: Theories and Principles**

This course provides an overview and general understanding of the field of counseling psychology. The course is designed to familiarize students with the basic concepts, interventions, scientific research, professional practices and contemporary issues of the profession of counseling psychology. Students will learn a variety of theoretical approaches and psychotherapy techniques to counseling, including psychoanalytic, behavioral, cognitive and humanistic approaches. The course contains both didactic and skill application to encourage competency in the performance of counseling skills.

*Prerequisite: PSYCH-101*

**SOC-310 (Formerly J203)** **3-0-3**  
**The Social Science of the Workplace**

This General Education Core course examines the contemporary world of work using analytic tools from a variety of disciplines, including sociology, psychology, and anthropology. Key themes include: the social organization of work, contemporary changes in occupations and professions, technology and the information age, the impact of globalization on work, the role of class, gender, race and ethnicity in shaping work experiences and worker identities, and the relationship between work and family. Students learn about basic social science research techniques, practice interpreting data and thinking critically about contemporary work issues, and develop their own arguments about the world of work.

**STAT-311 (Formerly J112)****3-0-3****Finding and Evaluating Statistical Data**

A Continuing and Professional Studies Core course in data gathering and analysis, focusing on the use of demographic and economic data that inform organizational decision making. Students will learn basic descriptive statistical measures and probability theory and develop an understanding of the basis for statistical decision-making techniques. A variety of resources for gathering data related to demographics, socio-economic and socio-geographic trends, economics data, and trends in business and industry will be presented. Students will also review and apply a variety of descriptive and/or inferential statistics to make meaning of these data. Students will learn to manipulate data using statistical software.

**WRTG-105****3-0-3****Writing About Workplace Culture**

Students in this thematic writing-specific course draw evidence from multiple sources while developing thesis-driven essays and other types of personal, academic and professional writing. To examine the purposely broad theme of workplace culture, students will research, write, and present on topics such as professional ethics, the multicultural workplace, technology on the job, workplace politics, and corporate citizenship. Students will also develop targeted information literacy skills and enhance their abilities to think independently and on teams.

## Graduate Course Descriptions

*This letter/number system is used to designate the disciplines and subjects offered within graduate programs of the University.*

### **COURSE PREFIX**

CADF	CAD Foundation
CMW	Midwifery
DMM	Disaster Medicine and Management
FAS	Fashion Apparel Studies
FASF	Fashion Apparel Studies Foundation
IARC	Interior Architecture
IARCP	Interior Architecture Preparatory
IDD	Interactive Design and Media
IDF	Industrial Design Foundation
IDT	Instructional Design and Technology
MBA	Master of Business Administration
MBB	MBA Pilot Bridge Program
MBF	Master of Business Foundation
MCM	Master of Construction Management
MMW	Midwifery
MRE	Real Estate
MSID	M.S. in Industrial Design
OCC	Occupational Therapy
PAS	Physician Assistant Studies
PASF	Physician Assistant Studies Foundation
SDN	Sustainable Design
SDNF	Sustainable Design Foundation
TAX	Tax
TES	Textile Engineering, PhD
TXD	Textile Design
TXE	Textile Engineering, MS
TXF	Textile Design Foundation

### **KEY TO COURSE DESCRIPTION INFORMATION**

Before registering for a course, students must satisfy prerequisites as indicated in the following course descriptions. When changes are made, students are to follow the requirements in the most recent catalog.





## Graduate Course Descriptions

**CADF-500** **3 credits**

### **CAD I for Industrial Design**

The course introduces students to computer-aided design with a focus on the industrial design processes. In an intuitive fashion, students create and refine designs using a solids-modeling software package. In order to recognize the critical role CAD plays in the development of designs, students will use designs created in design studio courses as the subject matter of the CAD activities. Design-control drawings, three-dimensional rendered drawings and perspective drawings will be the course's output.

**CADF-501** **3 credits**

### **CAD II: Interactive Design and Media Techniques**

This course will build upon principles introduced in introductory CAD courses. It is primarily a laboratory course in which students will learn to take their early design concepts through to the final presentation using advanced digital design techniques. Students will use multiple digital design software packages across computer platforms with an emphasis on CAID packages such as NURBS modelers and animation software, as well as vector-based, desktop-publishing programs and bitmap-based programs.

*Prerequisite: grade of "C" or better in CAD-206 or permission of the instructor*

**CMW602** **0.5 credits**

### **Interviewing and Counseling**

This is an on-campus intensive course focusing on the skills a midwife requires to successfully communicate with clients. This course will develop basic interviewing and counseling skills that build trust and demonstrate respect for women. Theory and practice of skills for interviewing and counseling women in all aspects of women's health care are offered.

**CMW604** **3 credits**

### **Advanced Anatomy and Physiology**

This course focuses on the structure of the human body and its mechanical, physical, and biochemical processes. Anatomical and physiological principles necessary for health care professionals are presented. Normal and abnormal structures and processes underlying health and disease are presented with connections made to assessment and diagnosis in the clinical setting.

**CMW605** **2 credits**

### **Professional Issues**

This course is designed to provide an appreciation of the history and critical issues in midwifery, as well as the health care field in general. This course will also increase appreciation of the variety of roles that a midwife can play and aid in understanding rights and responsibilities as a midwifery health care provider.

**CMW606** **2 credits**

### **Health and Lifestyles**

This course provides an overview of health promotion and public health concepts. The construct of wellness is explored. Lifestyle, relationships, and cultural competence are examined within the context of our own lives and midwifery practice.

**CMW607** **4 credits**

### **Healthcare of Women I**

This course presents basic principles and application of well-woman care across the life span. Sexuality, menstrual cycle function/dysfunction, common gynecological conditions, family planning and health care promotion are common threads in this course. Students receive information on physiology, health screening and midwifery management of common primary care conditions.

**CMW610** **4 credits**  
**Antepartum Care**

This course examines the fundamentals of prenatal care, including the components of prenatal care, criteria for assessing perinatal outcomes and the application of the midwifery management process in the antepartum period. Theoretical foundations for diagnosis and dating of pregnancy, common discomforts of pregnancy, assessment of pelvic adequacy and assessment of fetal well-being and nutrition in pregnancy are covered in depth.

**CMW611** **4 credits**  
**Intrapartum Care**

**CMW613** **1 credit**

This course teaches the principles of midwifery for the laboring woman and her family, correlating physiologic processes to the maternal and fetal experiences of labor and birth. Concepts of normal birth and its variations lead to thoughtful analysis of management options.

**CMW612** **2.5 credits**  
**Postpartum/Newborn Care**

This course develops the knowledge base for assessing the physical and emotional changes of the postpartum period, breastfeeding, early attachment and parenting behaviors. It provides the knowledge base for understanding the physiology of transition to extrauterine life and early newborn adaptations. Assessments for newborn health, gestational age and attachment behaviors are included.

**CMW613** **1 credit**  
**Embryology and Genetics**

This hybrid distance and on-campus course will cover basic concepts of genetics, including inheritance and genetic disorders. Concepts of embryology will include fertilization, implantation and the embryonic period.

**CMW617** **0.5 credits**  
**Postpartum Newborn Workshop**

This on-campus course is composed of case studies allowing students to evaluate assessment data and apply the midwifery management process to typical postpartum clients at various stages of the puerperium. Performing physical/neurological examination and gestational age assessments of the newborn will be reviewed. Case studies will emphasize midwifery management of common newborn variations and problems.

**CMW619** **4 credits**  
**Perinatal Complications**

This course examines the fundamentals of perinatal care of complex client(s) in the antepartum, intrapartum, postpartum and newborn periods. Students will utilize course materials to simulate and problem-solve written cases in a virtual midwifery practice. Midwifery management discussions and peer review will include a variety of topics of frequently seen complications in the perinatal period.

**CMW620** **2 credits**

## **Healthcare of Women II**

This course examines the fundamentals of advanced gynecological care. Theoretical foundations for assessment and diagnosis will include: anomalies, alterations and tumors of the reproductive tract; intimate partner violence and addictive disorders; sexual dysfunction and infertility; menstrual cycle disturbances and ectopic pregnancy; infections of the reproductive tract; and multiple systems medical problems.

**CMW 631** **2 credits**

### **Maternity and Well Woman Care 1**

The course consists of supervised clinical practice in the midwifery management of uncomplicated antepartum and well-woman clients needing routine primary care, care for common gynecologic problems and contraception. Students learn consistent and accurate use of the midwifery management process with emphasis on subjective and objective data collection and beginning assessment and plan development. An on-campus skills workshop prepares students for this clinical course and includes risk assessment, development of a needs assessment and problem list, and pertinent hand skills. Additionally, history taking and physical assessment will be reviewed and demonstrated. Microscopy skills will be introduced. Contraceptive techniques will be reviewed.

**CMW632** **3 credits**

### **Maternity and Well Woman Care 2**

The course consists of supervised clinical practice in the midwifery management of uncomplicated antepartum and well-woman clients needing routine primary care, care for common gynecologic problems and contraception. Students are expected to continue to demonstrate consistent and accurate use of the midwifery management process with emphasis on independent development of an assessment, plan for, and evaluation of, care. This course is three credits and consists completely of continued clinical practice in the midwifery management of uncomplicated antepartum and well woman clients needing routine primary care, care for common gynecologic problems and contraception. The pre-requisite is successful completion of CMW631, Clinical I.

**CMW633** **4 credits**

### **Full Scope Midwifery Care 1**

Clinical III adds supervised clinical practice in the care of uncomplicated intrapartum, postpartum and newborn clients. Students learn consistent and accurate use of the midwifery management process with emphasis on subjective and objective data collection and beginning assessment and plan development in the care of intrapartum clients. Management of patients experiencing complications/emergencies requiring consultation/ referral will be included. Emphasis is also placed on facilitating breast-feeding, positive family bonding, and management of newborns within their families. The pre-requisite is successful completion of CMW632, Clinical 2.

**CMW634** **5 credits**

### **Full Scope Midwifery Care 2**

Clinical IV consists of supervised clinical practice in full-scope midwifery care in a student role. Students manage uncomplicated and complicated clients needing primary care, gynecologic, intrapartum and perinatal care. Students continue to demonstrate consistent and accurate use of the midwifery management process with emphasis on independent assessments, planning, implementation and evaluation of care, consultation and referral. Pre-requisite is successful completion of CMW633, Clinical III.

**CMW 635** **3 credits**

**Basic Skills in Health Care**

This course is an introduction to common health care skills and knowledge used in clinical practice. Presentation of self as care provider to diverse clientele with respect for human rights is emphasized. Contents include but are not limited to vital sign measurement and interpretation, infection control, sterile technique, wound care, urinary catheterization, venipuncture, fetal and uterine external monitoring application, emergency response procedures, therapeutic presence and communication, and skills in team building and patient advocacy. Medical terminology, written and electronic medical records and basic laboratory assessments will be reviewed. Practice and successful return demonstration of selected skills will be done at the student's first on campus experience after completion of this course.

**CMW 636** **3 credits**

**Environments of Health Care**

The effects of various environments of care on social dynamics between health care providers and patients will be explored. Theories of stress and coping and shared leadership will be addressed. Environments examined will include: home, office/clinic, hospital/health care institution, and care in place – disaster/emergency care. Available resources in each environment and the evidence supporting their use or misuse will be discussed. Observational clinical experiences in a variety of environments will be described and analyzed via reflective journals and asynchronous seminar discussion. Midwifery role and scope of practice in the various environments will be highlighted. Identifying local health care providers and resources for future practice referrals situates midwifery care in a system which provides for needs of women and their families ranging from simple to complex.

**CMW 637** **3 credits**

**Health and Illness in Clinical Practice**

This course will examine concepts of health and illness at various stages of human development. The midwifery model of care and the midwifery management process will be introduced as frameworks guiding care practices. Wellness care and complementary integrated approaches will be discussed. Selected common health alterations at every life phase will be explored, with emphasis on the midwife's role for independent or collaborative management or referral. The plan of care for these clients – including further testing or assessment, therapeutics and educational needs - will be examined. Problem based learning scenarios will serve as the stimulus for identifying learning needs and developing midwifery care strategies.

**CMW638** **2.5 credits**

**Advanced Pharmacology I**

This course is a comprehensive course in pharmacology for women's health care. The language of pharmacology and the principles of pharmacodynamics and pharmacokinetics serve as the foundation for the course. Major classifications of agents that are covered in the course include: hormones, antimicrobials, analgesia and anesthesia, over-the-counter drugs. Prescriptive writing, including legal and ethical aspects, is also covered as well.

**CMW639** **0.5 credit**

**Advanced Pharmacology II**

This course is second in a two-part series in pharmacology for women's health care. Concepts and issues in drug prescription for pregnant women and their newborns are presented. Changes in pharmacodynamics and pharmacokinetics during pregnancy are reviewed. Major classifications of agents

covered in the course include: vitamins and minerals; uterotonins/uterotropins; and drugs administered to newborns.

**CMW640** **2 credits**

**Preparation for Full Scope Midwifery Practice I**

This on-campus course explores issues in midwifery practice including: the role, rights and responsibilities of the midwife in the clinical practice setting; the legal, ethical and financial realities of professional midwifery practice; alternatives in full scope midwifery care with examples from experts; and environments of midwifery care including home, hospital and birth center settings. Students take a closer look at one birth center model of childbearing care by spending time on site. Content covered in this visit includes: 1) the history, philosophy and development of the birth center movement in the United States and 2) the accreditation and needs assessment process.

**CMW699** **3 credits**

**Advanced Physical Assessment**

This course is designed for the individual preparing to begin a nurse-midwifery program of study. Midwives are often a woman's first contact with the health care system. Women seek care from midwives not only during the childbearing cycle, but for family planning and well woman health care throughout the adult life cycle. As primary care providers for women, nurse-midwives will use these skills of clinical assessment daily. At the completion of this course the student will have the knowledge and skills in physical assessment of the adult female to provide clinical services at a beginning level.

**DMM611** **3 credits**

**Principles of Disaster Medicine and Management**

This course provides students with a general overview of disaster events and covers the key components of disaster prevention, risk assessment and disaster management including: types of disasters, phases of disasters (preparedness, mitigation, response, and recovery), agencies involved in disaster situations, public service disruptions, mass casualty triage, human resource issues, media relations, ethical considerations, communications and incident command systems.

**DMM612** **3 credits**

**Foundations of Homeland Security and Defense**

The US has embraced the homeland security monolith having neither fully understood nor tamed all that it encompasses. This challenging course provides a broad overview of homeland security and homeland defense as undertaken in the United States since 9/11. The goal is to provide the generally accepted body of knowledge required of the homeland security professional. The course focuses on four areas: the enemy, animosity and potential outcomes of threats posed; the policies and procedures enacted since 9/11; federal, state and local governmental roles; and legal issues critical to the conduct of homeland security and defense activities by the military including the National Guard. The student will gain an understanding in asymmetric thinking, develop an appreciation for the growing body of literature in the discipline of homeland security, and have the opportunity to examine a key issue in depth through a term research paper.

**DMM615** **3 credits**

**Hazardous Materials & Industrial Safety**

This course provides an overview of the major hazardous materials commonly encountered and their effects on humans and wildlife. Industrial waste, pollution, nuclear waste, hazardous waste transportation and the management of hazardous material accidents are all covered.

**DMM617** **3 credits**

## **GIS in Emergency Management**

This course will provide students with an introduction into geographic information systems by infusing it into emergency management. The class will focus on the 3 major elements: 1) Fundamentals of GIS, 2) Knowledge of GIS software, and the 3) Understanding of the spatiality in emergency management situations.

**DMM619** **3 credits**

### **Natural Disasters**

The purpose of this course is to develop an understanding of the various types of natural disasters which plague the world. The student will study the forces of nature which cause these events to occur, the population effects of the event itself and the dynamic nature by which the event spawns further cataclysmic change in our environment.

**DMM623** **3 credits**

### **Weapons of Mass Destruction**

This course introduces students to the various types of biologic, chemical and nuclear/radiologic weapons, along with the clinical manifestations and management of exposure to these. Decontamination and institutional procedures for weapons of mass destruction incident management are also covered.

**DMM624** **3 credits**

### **Organizational Risk and Crisis Management**

This course examines key concepts in the understanding and management of risk in an organizational environment. Aspects of risk evolution, tools and techniques, project vulnerabilities, uncertainty, modeling and risk software are included.

**DMM 625** **3 credits**

### **Business Continuity – Planning for a Crisis**

The course explores the issues in maintaining a business in the midst of crisis and the disruption of resources. It includes planning for, responding to, and recovering from an internal or external crisis in the organization.

**DMM626** **3 credits**

### **Organizational Recovery and Planning**

This course discusses business and organizational implications of the disaster recovery lessons taught by 9/11, the California energy crisis, the anthrax scare and other related disastrous events as they relate to emergency decision making and planning. Special emphasis is directed toward infrastructure and IT/IS implications of process continuation.

**DMM627** **3 credits**

### **Principles of Terrorism**

The types of terrorism, along with the social, political and psychological motivations and ramifications of terrorism are the focus of this course. Threat risk assessment and prevention strategies are also components.

**DMM631** **3 credits**

### **Organizational Management and Communication in Disasters**

This course introduces students to theories of organizational dynamics and management as it pertains to crisis and disaster situations. The course also explores communication within the organization, with

external agencies, and with the public and media during and after disaster events.

*Prerequisite: DMM611*

**DMM635** **3 credits**

**Psychological Aspects of Disasters**

This course explores the psychological sequelae of disasters and traumatic events including acute stress disorder and posttraumatic stress disorder. The clinical presentation, assessment and management of these disorders are discussed. Clinical interventions such as post-event debriefing, short-term counseling and mental health referral in disaster situations are also covered.

This course includes an intensive on-campus experience. Offered in Summer only.

**DMM639** **3 credits**

**Principles of Disaster Exercises & Drills**

This course will prepare students to develop and implement effective emergency disaster drills and tabletop exercises. It will also encompass the principles of mass casualty triage. The principles of adult learning and educational assessment are also covered. This course includes an intensive on-campus experience. Offered in Summer only.

*Prerequisite: DMM611*

**DMM643** **3 credits**

**Public Health Implications of Disasters**

The purpose of this course is to develop an understanding of the concepts of public health as they relate to disaster management. The student will apply Noji's five phases of a disaster to actual disaster events during the last 25 years and will focus especially on what preparedness actions are necessary to safeguard the health of citizens and emergency personnel during a disaster event. Public health issues in disaster management that are covered include water and food supply disruption and contamination, waste disposal, environmental pollution and infectious disease outbreaks. The basic principles of epidemiology and health surveillance are also reviewed.

**DMM647** **3 credits**

**Disaster Emergency Planning**

This course encompasses the major aspects of a comprehensive disaster plan including: physical resources, human resource considerations, interagency interaction, communication, incident command systems, evacuation of injured, crowd control, traffic management, hospital capacity, decontamination, material management logistics, media relations, mortuary services, survivor and rescuer grief counseling, and exercises.

*Prerequisite: DMM611*

**DMM648** **3 credits**

**Emergency Preparedness for Special Needs Population**

The term "special needs" is widely used within the disaster services and the emergency management world. It generally refers to an extremely broad group of people with physical disabilities, people with serious mental illness, pregnant women, children, and the elderly. These groups represent a large and complex variety of concerns and challenges. Many of these groups have little in common beyond the fact that they are often left out of programs, services, and emergency planning.

This course will introduce students to planning, responding, mitigating, and recovering from a disaster as it pertains to the special needs population. This will include specific functional roles, resource identification and response of personnel involved in disaster management. Students will be presented

with problem based learning assignments and based on the assigned readings, research, and personal experiences, they will be able to analyze and apply the theories and principals pertaining to the response and recovery of an event to these special populations.

**DMM649** **3 credits**

**Healthcare Emergency Management**

Healthcare emergency management has steadily evolved over decades but at an increased rate since September 11, 2001. The increased emphasis on disaster preparedness from both the public as well as regulatory agencies now requires a level of knowledge beyond the technical level. This course is designed to provide a foundation in hospital emergency preparedness.

**DMM651** **3 credits**

**Applied Research Methods & Statistics**

Basic statistics and research methods used in the medical and social sciences are covered in this course. Students will have the opportunity to review current medical research and evaluate it with regard to its application to practice.

**DMM653** **3 credits**

**Clinical Disaster Medicine**

This course is designed to expose the student to the clinical aspects of disaster medicine by encouraging exploration of the roles of healthcare providers in disasters, the study of clinical situations that occur during disasters, analysis of public, occupational, and environmental health issues, and applying clinical research and epidemiology concepts.

*Prerequisites: DMM611*

**DMM755** **3 credits**

**Capstone Experience in Disaster Medicine and Management**

In this capstone experience students will complete either an: original research project; an original disaster plan; a systematic review paper on a disaster-related topic with thorough literature search, analysis and compilation; or an internship with disaster plan. All of these will involve a thorough literature search, an analysis of the current research, integration of multiple facets of disaster medicine and management and completion of a substantial written product.

*Prerequisites: DMM611, DMM631, DMM647, DMM651*

**DMM791** **3 credits**

**Internship in Disaster Medicine and Management**

This experience is an optional internship in disaster medicine or management at an agency involved in disaster preparedness or response. This may include international experiences when available.

*Prerequisites: DMM611, DMM631, DMM647 Requirements may apply, see program director or Office of Career Services for details.*

**DMM797** **1-3 credits**

**Special Topics in Disaster Medicine and Management**

This course provides an opportunity to explore topics in disaster medicine and management not developed in other courses. Examples include recent complex humanitarian emergencies, disasters, or catastrophes, new practice technology, essential health policy changes, new research findings, and other cutting edge materials. Students may take this course more than once as the topics differ each time it is offered.



**FAS611** **3 credits**

**Product Development**

In the development of any apparel product, attention must be given to form, function, fit and appearance and to their interrelationship. Form involves the influence of preference and individual choices. Function includes such aspects as “fitness for use,” taking into account levels of activity, gender and age. Account must also be taken of the influence of markets, as well as the opportunities and constraints presented by design, cost and manufacturing systems. At the managerial level, the individual is faced with constant change from original concept to the end product. Multiple adjustments to the product arise at every phase requiring tremendous ingenuity and problem-solving skills. Graduates will be faced with this kind of process in the apparel industry and need to manage and follow through with the development of a product.

**FAS612** **3 credits**

**Integrated Technology**

This course aims at showing that state-of-the-art technology in a given field has become an essential component for strategic leadership, profitability and stable employment. The point is made by providing a broad perspective on the major technical advances experienced by the apparel industry from the 1980s and their positive impact on the national industries where they originated and/or were adopted. Analysis of the difficulties met by high wage countries failing to follow that course helps to reinforce the point. Review of the factors accounting for these advances brings out the critical importance of technology transfer and fusion in the formulation and development of basic concepts. Detailing both processes offers the opportunity to introduce the notion of systemic thinking and its growing influence on management style. It is intended that the student will gain a global perspective of the textile and apparel business and of the growing role played by advanced technology and its impact on finances and personnel.

**FAS621** **3 credits**

**Global Marketing and Sourcing Strategies (Marketing Option)**

U.S. textile and apparel companies are under siege, facing competitive threats that have been continually mounting for years. What it takes to be successful in the future is explored. The concept of “business as usual” has long outlived its usefulness, and new and refreshing approaches are necessary. Students will be introduced to avant-garde management concepts often espoused, but seldom adopted, by most textile and apparel managements. The course is designed to introduce the student to the global perspective of today’s apparel industry and to prepare the student to make critical international marketing and sourcing decisions within a complex economic environment. Students will explore the major variations which occur across international markets - economic, social, and cultural; examine the behavior of business within different marketing and manufacturing contexts; and consider the factors involved in making effective global marketing and sourcing decisions.

**FAS622** **3 credits**

**Distribution Management (Marketing Option)**

Globalization of the textile and apparel business will require companies to change the way they operate in an attempt to keep one step ahead of the competition. This is particularly the case for multinational companies and those sourcing from overseas. They will have to significantly change their logistic strategy with regard to distribution management, taking into account new computer technology, systems management and product compatibility. The course will: (a) distinguish the role of physical distribution management (PDM) as a unique discipline, and identify the demand placed upon PDM from both U.S. and international operations; (b) assess and evaluate the PDM function comparing alternative

technology-based strategies and/or commercially determined “trade-off” policies that prevail in this dynamic trading environment; and (c) identify key issues in the planning and implementation of a commercially sound distribution operation, with an emphasis on transport management, warehouse management and total distribution management.

**FAS631** **3 credits**

**Computer Integrated Management  
(Advanced Manufacturing Option)**

The erosion of the textile and apparel production base in the western world is a serious challenge for the U.S. domestic industry. Progressive domestic companies are now placing greater emphasis on the introduction of computer-aided design and quick response technology. This computer-based technology includes: (a) the product development cycle using CAD/CAM techniques to reduce the time involved in designing and introducing new products to the marketplace; (b) increased process control and manufacturing efficiency; and (c) the potential for reducing the delivery response time between textile manufacturers, apparel manufacturers and the retailer. The course will evaluate the cost/benefits of CAD/CAM technology and through lecture, laboratory and experiential activities, will examine the role of CAD/CAM in risk reduction, creativity enhancement and improved customer service.

**FAS632** **3 credits**

**Systems Engineering (Advanced Manufacturing Option)**

Various production systems in apparel manufacturing are under investigation and are being subjected to critical review in an attempt to improve responsiveness and flexibility to meet consumer needs and desires on a timely basis. This course will focus on hardware and software linkages within the apparel industry; maintaining a global perspective of information flow between suppliers and consumers; developing criteria for examining, measuring and assessing the effects of changing environments on assembly operations; and productivity improvements and financial implications.

**FAS731** **3 credits**

**Textile Marketing**

The course is designed to integrate students’ previous exposure to general marketing principles with specific application to the textile, apparel and related industries. The marketing planning process will be integrated into studies of textile products, promotions, merchandising, distribution, competition and inventory. The course will identify and analyze worldwide textile marketing opportunities and introduce the concept of global strategy formation through development of a marketing plan for a textile/apparel/manufactured product in two distinct countries. The roles of key textile and apparel-producing countries and sourcing there from, trade agreements and treaties, and world trade blocs like NAFTA and the WTO will be examined through readings, presentations, class discussion, case analysis and visiting speakers.

**FAS 732** **3 credits**

**Global Textile & Apparel Industry Seminar**

This course will expose students to a wide variety of topics and enable them to discuss broad issues that cut across several disciplines. This course will enable the student to evaluate the content and delivery of a series of presentations. It will also provide an opportunity to conduct research on a specific topic and then write a comprehensive report of their findings.

**FAS 734** **3 credits**

**Inventory & Logistics Mgmt**

The course provides a broad introduction to many critical facets of supply chain. Students in this course will understand existing tools utilized in managing inventory and logistics in the global supply chain. The course covers topics in inventory logistics management, network design, value of information sharing, the international supply chain, supply chain contracts, and risk management.

**FAS763** **3 credits**  
**Research Project**

This course is a capstone course for Fashion Apparel Studies. The student, with the consent of the instructor, will perform self directed research in an appropriate area of interest within an apparel company. The student will investigate, document and then analyze how their research findings affect the operation of the individual company, its suppliers, and its customers. Finally, the student will recommend changes that will improve the performance of the company and the other members of the supply chain.

*Prerequisite: MBA-762*

**FAS778** **3 credits**  
**Computer-Aided Design/Computer-Aided Manufacture**

The continued erosion of the textile and apparel production base in the United States, caused by increased imports of textile and apparel products, is a serious challenge for the domestic industry. Progressive sectors of the textile and apparel industries are consequently now placing a greater focus on the introduction of "Quick Response Technology." This computer-based technology includes: (a) the product development cycle using CAD/CAM techniques to reduce the time involved in designing and introducing new products to the marketplace; (b) increased process control and manufacturing efficiency; (c) the potential for reducing the delivery response time between textile manufacturers, apparel manufacturers and the retailer. This course will evaluate the cost/benefit of CAD/CAM technology to textile and apparel companies. Through lecture, lab and experiential learning, it will examine the role of CAD/CAM in risk reduction, creativity experiments and improved customer service. The potential use of CAD/CAM as a marketing tool, and the potential for Electronic Graphics Communication among textile manufacturers, apparel manufacturers and retailers, will also be analyzed.

**FAS790** **3 credits**  
**Textile and Apparel Business Policy and Strategic Planning in a Global Environment**

This course will study the textile and apparel business in a highly competitive and complex environment. Consideration will be given to the changing demands of the marketplace and consumers, and the external forces that can impact a company's performance, many of which are beyond management's control. The process and techniques of strategy formulation, implementation and evaluation are studied. The course will include lectures, workshops, case studies and assignments.

**FAS791** **3 credits**  
**Internship**

Internships provide students with an opportunity to apply and further develop the knowledge they have gained in the classroom. Under faculty supervision, students work in salaried positions related to their career goals. While on their assignments, students develop meaningful learning objectives, attend an internship seminar, complete challenging assignments and write bi-weekly reports analyzing articles in academic journals and practitioner publications.

*Prerequisites: Minimum of 18 graduate credits (excluding foundation courses); available to full-time*

*students only and subject to availability and eligibility; permission required, see program director or Office of Career Services for details.*

**FAS797** **1-3 credits**  
**Selected Topics**

**FAS798** **3 credits**  
**Independent Study**

Students may select to pursue an independent project or research topic. Approval is required, see appropriate form online on the University Registrar's web page <http://www.philau.edu/registrar/> for more information.

**FAS923** **2 credits**  
**Thesis Preparation**

The course incorporates the initial steps of developing a thesis in a selected area of concentrated study including: a thesis proposal, a review of the relevant academic and/or professional literature, developing an outline, and writing the first chapter. The student will establish a dialogue with their Thesis Committee Chair, meet with the Chair periodically for guidance throughout this process and adhere to the deadlines for all of the required submissions, A minimum grade of B- is required to receive credit for this course.

**FAS941** **4 credits**  
**Project Thesis**

The thesis should be the result of original investigation of relevant literature in the field of apparel and/or retail. The thesis should exemplify original scholarship and critical judgment while examining a topic in depth. A successful thesis will demonstrate the student's abilities in collecting and evaluating information, critically examining existing theories and then constructing testing and defending a coherent argument. The thesis must be organized, demonstrate clarity of purpose, reveal evidence of critical analysis, and include complete and accurate citations and documentation for all sources.

Since the thesis is the culmination of rigorous preparation as developed in Thesis Preparation and should only be attempted in the final semester of the program. In consultation with the Thesis Committee Chair and its members, the student will complete the writing of the thesis according to the University Guide for the preparation of Doctoral Dissertations and Master's Thesis December 2007 that was begun in FAS923 Thesis Preparation.

*The thesis must be a minimum of 40-50 pages in length, not including figures, tables and graphs using the most current Philadelphia University Guide For The Preparation Of Doctoral Dissertation And Master's Theses document. Thesis guidelines available at <http://www.philau.edu/gradstudent/>  
Prerequisite: FAS923 Thesis Preparation*

**FASF501** **3 credits**  
**Prototyping**

Students will have a basic understanding of garment construction combined with flat-pattern concepts. The use of industrial equipment and basic slopers will be utilized to produce a sample book of construction details and garments.

**FASF505** **3 credits**  
**Apparel Production**

Basic operations in all segments of an apparel plant are studied from the initial receipt of raw materials through storage, inspection, marker making, spreading, cutting, sewing, pressing, warehousing, shipping

and customer returns. Latest technological advances in each of these areas will be discussed with marker making performed on a Gerber Accumark 300 System. Inventory management, labor issues, ergonomics and relevant public policies are also studied.

*Prerequisites: FASHMGT-101, FASHMGT-201 or FASHDES-*

**FASF 510** **3 credits**  
**Apparel Work Measurement**

The fundamentals of rate setting, productivity measurement and methods analysis and improvements are studied. The use of standard data including methods-time-measurement, scientific operator training and similar industrial engineering techniques are covered. Learning tools, with emphasis on videotape, are studied and used. Laboratory work stresses practice by student.

*Prerequisite: FASHMGT-305*

**IARCP-501** **4 credits**  
**Design I for I.A.**

**(Required for those with unrelated undergraduate degrees)**

This studio is an introduction to the world of design with an emphasis on the built environment. Focus is on fundamental design principles, vocabulary, process methodologies and problem-solving strategies, along with developing and exploring methods of visual expression. Lectures and demonstrations stress abstraction as a primary building block in addition to an emphasis on historical case-study methodologies as a means of developing successful design strategies. Course work explores questions related to seeing and understanding design through the process of making and representing real scale objects and spaces.

**IARCP-502** **4 credits**  
**Design II for I.A**

**(Required for those with unrelated undergraduate degrees)**

The focus of this studio is an introduction to the elements, principles and theories of interior design. Through a series of projects of increasing size, students explore the conceptual, theoretical, functional, and aesthetic issues of designing interior space. Included are the elements of enclosure, the interrelationship of spaces, and environmental and behavior factors, as well as symbolism and socio-cultural factors. The experiential and intuitive nature of the design process is investigated as is the contributing role of finishes and furnishings in the definition of architectural space.

*Prerequisites: Design I for I.A. and Graphic Representation*

**IARCP-503** **3 credits**  
**Graphic Representation**

**(Required for those with unrelated undergraduate degrees)**

This course covers the fundamentals of freehand and mechanical architectural graphic representation, with a special focus on the interior environment, for both presentation and construction documentation purposes. Topics include sketching and the construction of orthographic and paraline projections, including floor plans, elevations, sections, reflected ceiling plans, and one-point and two-point perspective drawings. In addition, students learn how to graphically depict furniture, to enhance their drawings through the use of shade and shadow, and the basics of architectural model building. Projects include surveying of actual sites and translating field notes into a set of coordinated drawings.

**IARCP-504** **3 credits**  
**Visual Communication I**  
**(Required for those with unrelated undergraduate degrees)**

The primary intent of this course is to introduce students to fundamental CAD skills using AutoCad, and to establish the computer as an effective tool for architectural graphic communication and as a means for exploring, refining, and presenting design ideas. Through a series of assignments and projects, students will acquire the knowledge and skills to digitally communicate design concepts at various stages of development, and for multiple purposes.

*Prerequisites:* Design I for I.A. and Graphic Representation

**IARCP-505** **3 credits**  
**History of Design I for I.A.**  
**(Required for those with unrelated undergraduate degrees)**

This lecture course surveys key examples of Western and non-Western architecture produced from prehistory through the 21<sup>st</sup> century. By tracing significant historical themes, students compare and contrast the various historical styles and acquire a working vocabulary for both analyzing and evaluating the built environment, and relating developments in the built environment to other forms of artistic expression such as painting and sculpture. Works are placed within a broad historical context by considering factors such as religion, philosophy, political and economic developments, as well as materials, construction methods, and local factors.

**IARCP-508** **3 credits**  
**Presentation Techniques**  
**(Required for those with unrelated undergraduate degrees)**

This course explores the broad array of presentation techniques available to advantageously convey a designed interior. Emphasizing the presentation of a complete interior, students will refine and expand their drawing and model building skills using a wide range of media, and integrating manual and digital techniques. This course also addresses the interrelationship of the visual and verbal components of making an effective presentation.

*Prerequisites:* Design I for I.A. and Graphic Representation

**IARC-601** **4 credits**  
**Design III for I.A.**

Building on skills and knowledge introduced in Design I and Design II, this studio focuses on the process of designing multi-space facilities. Through structured, medium scale design projects, students engage in the conceptual, theoretical, functional, and aesthetic issues, integrating research and evidenced based decision making with the intuitive nature of the design process. Emphasis is placed on the fundamental processes related to the development of a complete interior, from research, programming and space planning, to the selection and arrangement of appropriate furnishings and finishes. Students will also explore the influence of behavioral, socio-economic, and cultural factors on the functional and aesthetic quality of the built environment, and will communicate their designs by applying a range of professional presentation techniques.

*Prerequisite:* Design II for I.A.

**IARC-603** **3 credits**

### **History of Design II for I.A. (Required)**

This course is an overview of the history of interior architecture and design, furniture, and the decorative arts. Lectures, readings, assignments and field trips, cover the development of period styles, major movements, and theoretical concepts of design as they relate to the complete interior. In depth discussions and site visits will focus on critical analysis and developing awareness of historical precedents.

*Prerequisite:* History of Design I for I.A.

### **IARC-606 4 credits**

#### **Design IV for I.A. (Required)**

Within the context of a specific program and client, students in this studio develop design solutions for a retail interior, and a mid-sized corporate facility while addressing the role of the interior designer in branding. The goals of this course include developing a comprehensive solution using innovative and appropriate conceptual approaches, refining the ability to integrate appropriate choices in finishes, furniture, and equipment (FF&E), and on the development of proficiency in handling three-dimensional space.

*Prerequisite:* Design III for I.A.

### **IARC-607 3 credits**

#### **Technology I for I.A. (Required)**

This course provides an overview of basic structural principles and systems and an in-depth study of non-structural interior construction and finish materials. Lectures and assignments address how the planning of interior space is impacted by the nature of various structural systems, and examine the visual and physical properties, application, and maintenance requirements of interior materials. In addition students are introduced to interior detailing in relation to architectural woodwork, millwork, partitions, floors, ceilings, stairs, custom cabinetry, furniture and specialty elements. The influence of sustainability and building codes on the choice of materials is also covered.

*Prerequisite:* Design II for I.A.

### **IARC-608 3 credits**

#### **Technology II for I.A. (Required)**

This second course in the Interior Architecture technology sequence introduces students to the art and science of interior illumination, energy usage, and various control systems including power, security, communications, and life-safety. Both artificial illumination and day lighting are covered with an emphasis on the architectural aspects of lighting design. Through lectures, demonstrations, and assignments, student explore various lighting design strategies, the effects of light on color, and how effective lighting can contribute to the goal of creating a sustainable interior.

*Prerequisite:* Technology I for I.A.

### **IARC-604 3 credits**

#### **Visual Communication II for I.A. (Required)**

This Revit based advanced digital imaging course focuses on the advantages of building modeling software (BIM) and related documentation techniques for integrated practice and collaboration. Students will build their knowledge of professional interior construction and specification

documentation, produce a set of construction drawings for an interiors project, and explore other uses for this powerful and important type of program.

*Prerequisites:* Design III I.A., Visual Communication I

**IARC-610** **3 credits**

**Textiles and Materials (Required)**

This course focuses on the art and science of textiles, and other non-textile based wall coverings in the creation of safe, sustainable, and aesthetically pleasing commercial and residential interiors. Key topics include the history of textile design and manufacture, man-made and synthetic fibers, methods of construction, weaving, dying, and printing, and inherent performance characteristics. Lectures and assignments cover textile finishing and testing, as well as relevant codes, regulations and standards. Students also learn about the appropriate selection, specification, and procurement of materials and finished goods such as carpeting, upholstery, wall coverings, and window treatments and their correct installation and maintenance requirements.

**IARC-701** **3 credits**

**Design V for I.A. - Abroad (Required)**

This studio occurs abroad and focuses on how culture, age, gender, and physical ability influence design, while exploring innovative materials and craft in the field of interior architecture. Assigned projects address how design needs may vary for different socio-economic populations and how understanding social and cultural norms are relevant to making appropriate design decisions. Students consider the role of construction techniques, material selection, and ergonomics in the design process and detailing as they will apply this information to their design work and the detailing of custom elements.

*Prerequisite:* Design IV for I.A.

**IARC-703** **2 credits**

**History of Design III for I.A. – Abroad (Required)**

This advanced history and theory seminar immerses students in both historical and contemporary examples of architecture, interiors and decorative arts in Scandinavia. Through a combination of readings, writings, discussion and field work, students explore the relationship between culture, and building form, furnishings, and the distinctive use of materials and ornament.

*Prerequisite:* History of Design II for I.A.

**IARC-702** **4 credits**

**Design VI for I.A.**

This advanced studio emphasizes the resolution of complex design issues in the context of health care interiors. In determining a design strategy, students research, develop and analyze the problem, relevant environment and behavioral factors, and then proceed with a completed design. Holistic development of concept, current sustainable design solutions, large-scale space planning, materials, construction details, lighting design, building systems, building codes, handicapped accessibility and furnishings are emphasized in the completed work.

*Prerequisite:* Design V for I.A.

**IARC-707** **3 credits**



### **Technology III for I.A. (Required)**

This final course in the technology sequence focuses on the study of a broad range of mechanical, plumbing, HVAC, and other building systems and their integration with interior construction. Students are introduced to the issues of acoustical control, indoor air quality, and life safety in building interiors and the critical role that interior building systems and materials play in the establishment of human comfort and the protection of the health, safety and welfare of building occupants.

*Prerequisite:* Technology II for I.A.

### **IARC-708 3 credits** **Professional Practice and Ethics (Required)**

Students in this course learn about the managerial, financial, legal, and ethical aspects of professional practice, including types of business formations, marketing, contracts, industry relationships, and project management. Lectures and assignments cover the range of specialized services performed by design firms, and the role and responsibilities of the designer in different positions and at various stages of their career. The importance of lifelong learning, professional development, and the value and role of professional associations is also discussed.

*Prerequisite:* Design IV for I.A.

### **IARC-709 2 credits** **Research and Programming (Required)**

This course provides the foundation for the Thesis course in the following semester, and covers standard and emerging methods of research and programming in the field of interior design and architecture. In consultation with faculty, students will select a project type and site, and produce in-depth research, precedent studies, programming and analysis, embracing relevant issues such as cultural, sociological, political, economic, environmental, anthropometric, human factors, life safety, and construction methods and technologies, amongst others. Students are expected to organize and synthesize this information and document their research in both written and graphic form. This information along with architectural documentation and analysis of the selected site is presented to a group of jurors with expertise in the area of research and/or project type.

*Prerequisite:* Design V for I.A.

### **IARC-710 5 credits** **Thesis for Interior Architecture (Required)**

Building on the semester of research and programming (IARC-709), the Thesis in Interior Architecture challenges students to integrate knowledge and skills acquired throughout the curriculum and can be undertaken only after successful completion of appropriate coursework. While most students will complete this course using an applied project based approach, students have an option of pursuing theoretical research.

Thesis/Applied: This major culminating design experience is a self-directed, faculty monitored independent study appropriate for students interested in exploring the creative/design dimensions of Interior Architecture while exploring a significant and advanced question in the discipline. Students select one project from a range of carefully screened design projects of appropriate and comparable scope, sophistication, and complexity.

Thesis/Theoretical: The thesis option is a self-directed, faculty monitored independent study appropriate for students interested in exploring theoretical dimension(s) in Interior Architecture. The thesis option will be attractive to students interested in pursuing doctoral studies and/or academic careers.

*Prerequisites*: Design VI for I.A., Technology III for I.A., Visual Communication II for I.A. & Research and Programming

**IARC-791** **1 credit**  
**Internship for I.A. (Required)**

Internship is a college-monitored work experience that provides the student with the opportunity to integrate theory and practice in a professional work environment. While gaining practical experience through a minimum of 240 hours at the job placement site, students further develop the knowledge and skills gained in the classroom. Placements are determined prior to the beginning of the semester, at which time learning objectives are determined with faculty supervision. Students keep a reflective journal based on their work experience throughout the semester, and are evaluated jointly by the host mentor and faculty. Students are exposed to a broad spectrum of professional practice, particularly those not available in the academic setting, and are expected to make a professional contribution to the work of their host organization.

*Prerequisite*: Design IV for I.A.

**IDD610** **3 credits**  
**Introduction to Digital Audio Production**

This course introduces students to basic and intermediate digital audio concepts and skills for use in a broad array of multimedia, including instructional applications. Students will generate a variety of professional-grade digital audio artifacts using industry-standard software and processes; instruction will focus on common elements of digital audio production to allow transfer of knowledge to various tools and platforms rather than focusing solely on the mastery of a single tool. Course topics include basic digital audio theory, comparing and selecting input and output devices, non-linear editing, mixing and mastering, multi-tracking, audio for video, and optimizing audio for different delivery methods. Students will create at least one example of instructional audio to use in their portfolio.

**IDD621** **6 credits**  
**Digital Experience Design**

This first studio in the sequence of three will develop the student's ability to synthesize 2D, 3D and 4D conceptions of space with knowledge and skills of interactivity to create and produce the digital experience. This studio will solidify and expand the student's vocabulary and ability to innovate within the digital context. Students will complete a project that explores spatial, emotional, informational and communicative issues. The project should reflect a high degree of conceptual, aesthetic and technical mastery for successful completion of this course.

*Prerequisite*: Admission into the Master of Science in Interactive Design and Media program

**IDD623** **3 credits**  
**Theory of Electronic Communication Seminar II**

This course provides students with a theoretical understanding of the role of the Interactive designer within the constantly evolving electronic marketplace. Issues of e-commerce, digital communication,

electronic ethics and professional practice will be discussed. Special focus will be placed on how our existing culture has been, and is currently being, revolutionized by the information explosion. A portion of this course will be taught using the Internet as a tool to share information, complete research and communicate with experts in the field.

*Prerequisite: Admission into the Master of Science in Interactive Design and Media program*

**IDD624** **3 credits**  
**Multimedia**

This elective will focus on expanding the student's understanding of and ability to create effective multimedia experiences. A semester-long project will develop their mastery of visual, audio, temporal and kinesthetic elements and principals of design. The project will explore the methodology and tools used to create sophisticated experiential design. Some key concerns of the course are human-centered interfaces, intuitive navigational systems and mixed-media narrative. Projects will combine text, sound, images and movement within 4D-responsive environments. A final, fully functional prototype, presented on CD-ROM, will be required.

**IDD625** **3 credits**  
**Advanced Web Design and Strategy**

This course will focus on the design of the online experience. Emphasis will be given to an understanding and mastery of the design issues involved in creating user interfaces and content for low bandwidth dissemination. A semester-long project will develop the student's abilities in both the design and production of web-based media. The project will include components such as site architecture/planning, digital imaging and typography for the web, interface design, and XHTML and CSS production.

**IDD626** **3 credits**  
**Digital Photography**

This elective course focuses on the use of the tools and techniques of digital photography; cameras, scanners, printers, along with the computer and software programs needed to render images. This course is intended for Web and e-designers, as well as graphic designers, and teaches how to render digital images for their respective domains. The course contains a brief description of traditional photography and the aesthetic issues addressed in its history along with how these issues are both similar and different from those of digital photography. Particular emphasis will be placed on the difference between description and suggestion and how this impacts the interpretation of images within a design context.

**IDD627** **3 credits**  
**Digital Video Design and Production**

This course will introduce the student to the basics of non-linear digital video and audio production techniques. Projects will focus on the potential of narrative as a main component of any time-based media application, with assignments ranging from short exercises in visual storytelling/narrative to a final, more complex project such as the design of a video title sequence. Students will develop an understanding of story-boarding, scene visualization and editing techniques, along with competency in video and audio software packages such as Final Cut Pro, After Effects and Pro Tools.

**IDD628** **3 credits**  
**3D Modeling**

This elective course exposes students to the conceptual and technical aspects of three-dimensional modeling, photo-realistic rendering and virtual environments. Students will complete a series of specifically designed exercises of increasing difficulty, leading to a final project of the student's choosing.

The class will cover the basic principles of 3D modeling and animation including polygonal and NURBS modeling, texturing, lighting, and animation.

**IDD629** **3 credits**

**Introduction to Flash**

This course will explore the use of Macromedia Flash to create instructional materials for CD-ROM or Web delivery. Students will create scaleable vector graphics, develop animated and interactive elements, use ActionScript to control these elements and learn design principles appropriate to the effective use of Flash elements.

**IDD631** **6 credits**

**Digital Innovation Design**

This second in a sequence of three studios focuses on the ability of individual designers to pursue innovation. This course is comprised of several projects which highlight the role that interactive designers play in the multi-disciplinary attempt to bridge the gap between functionality and usability. Students will address current interface design issues through a series of screen-based projects, each ranging in complexity and theme, and placing particular emphasis on the visual and semantic aspects of design solutions. Students will be expected to seek new ways to navigate through 4D environments, challenging common interface paradigms. They are encouraged to build 4D spaces that are expressive, dynamic and experiential, while retaining their intuitive usefulness.

**IDD632** **3 credits**

**Database Management and Scripting**

Using PHP, students will learn fundamental server-side scripting concepts like creating arrays and functions, automating Unix commands, gathering and processing user input, and dynamically writing out XHTML and JavaScript. Relational Database concepts are covered and students will learn to conceptually model data and to create, query, and manage their database using SQL. The course will culminate with the students, for their final project, creating a web application that ties XHTML front-end to a MySQL database using PHP.

**IDD635** **3 credits**

**Interactive Narrative/Drama**

Under development.

**IDD743** **3 credits**

**Flash Action Scripting**

This course is a continuation of Introduction to Flash. Basic Flash interactivity and action scripting will be covered in depth. Topics covered in this course will include advanced interactivity, navigation tricks, variables, looping and decision-making, sound and sprites.

*Prerequisite: IDD629*

**IDD791** **3 credits**

**Internship**

Internships provide an opportunity for professional experience supporting application and further development of the knowledge gained in the classroom. Under faculty supervision, students work in positions related to their program and/or career goal, develop learning objectives and complete reflective academic assignments. Students should be exposed to a broad spectrum of professional practices, particularly those not available in the academic setting, and are expected to make a

professional contribution to their employer. *Requirements may apply, see program director or Office of Career Services for details.*

**IDD798** **3 credits**  
**Independent Study & Research**

This course will allow students to pursue individual areas of interest while working jointly with a faculty member. Enrollment is subject to the availability and approval of both the program director and faculty member. The student must have 18 or more graduate-level credits, and a prospectus of the proposed independent study must be approved at least one month prior to registration. See appropriate form available online at Registrar's website, <http://www.philau.edu/registrar/>.

**IDD941** **3 credits**  
**Interactive Design Synthesis Project Preparation**

This course is the first step towards completing the final synthesis project. Students will be asked to identify and analyze potential projects through a number of lenses including technical feasibility, marketability and design potential. With faculty guidance, each student will select a particular project based upon individual interests and professional aspirations. In order to successfully complete this course, a final document must be submitted by the student outlining the relevant factors that will determine the route to developing a successful synthesis project.

*Prerequisites: IDD621, IDD623*

**IDD942** **6 credits**  
**Interactive Design Synthesis Project**

This is the third of a sequence of three studios focusing on interdisciplinary interactive design. This synthesis studio will develop the ability of the interactive designer to successfully bring an interactive design project to completion. Students will develop a final, working prototype of a product, service, entertainment or publication of their choice that synthesizes all of their knowledge and skill from the previous semesters. The final project must demonstrate marketability and/or successful functionality within the larger community.

*Prerequisites: IDD631, IDD941*

**IDF500** **3 credits**  
**Drawing: Design and Development**

This is an advanced drawing course developed for designers of all disciplines who want to improve the designer's ability to apply knowledge imparted in other courses to the development of designs. Wherever possible the subject matter of the students' design studio courses will be used as the subject matter for drawing exercises.

*Prerequisite: VSDRW-101 and INDD-102*

**IDF502** **3 credits**  
**Foundations in Web Design and Strategy**

This course will focus on the principles of raster and vector electronic imaging as a means to provide a solid foundation needed to succeed in the interactive design field. This is a lab-based class with specific instruction in Adobe Photoshop and Adobe Illustrator. This is a foundation course that does not count for credit toward the graduate degree.

**IDF503** **3 credits**  
**Theory of Electronic Communication I**

This course introduces students to the theoretical understanding of the role of the interactive designer. Special focus will be placed on how our existing culture has been, and is currently being, revolutionized by the information revolution. This is a foundation course that does not count for credit toward the graduate degree.

**IDF505** **3 credits**

**Materials and Processes: Manufacturing**

This course is concerned with the exploration of materials used in the mass production of products, the processes used to shape these materials and the applicability of these materials to product-design solutions. Students should be prepared to visit a number of manufacturing facilities. A survey of rapid prototyping technologies completes the course.

*Prerequisite: grade of "C" or better in INDD-102 or ENGR-102*

**IDF506** **3 credits**

**Application Software**

Using Windows and Mac platforms, this foundation course will focus on experiences which will familiarize students with instructional applications and personal productivity uses of microcomputers. Word processing, database management, spreadsheets, graphic tools and telecommunications will be analyzed in terms of their application to business and education. This is a foundation course that does not count for credit toward the graduate degree.

**IDF507** **4 credits**

**Design I for Industrial Design**

This studio is an introduction to design for undergraduate majors in industrial design. The course will provide an intensive introduction to design as an iterative problem-solving process. It will also introduce strategies for making and analyzing form, and present basic techniques of two-dimensional visualization and documentation of three-dimensional objects and principles of design critique, testing and research.

**IDF508** **3 credits**

**Materials and Process: Fabrication**

This course introduces shop techniques as they pertain to industrial design model-making and prototype construction. All industrial design students must take this course for shop equipment safety training and pass a safety test. Throughout the semester, attention is given to safety precautions for the shop, along with demonstrations of shop equipment and fabrication processes. A major portion of the course will consist of developing an understanding of the materials and machinery commonly used by industrial designers for producing both working and appearance models.

**IDF509** **3 credits**

**Rendering for Industrial Design**

An introduction to the traditional techniques and materials that industrial designers use to develop and represent three-dimensional concepts and ideas. Students become proficient in the use of pencils, markers, pastels and airbrush on a variety of media. Emphasis is placed on understanding the significance of color and graphic applications for industrial design.

*Prerequisite: DRAW-201 or permission of the instructor*

**IDF510** **3 credits**

**Ergonomic Studies**

This course analyzes human factors as related to broad aspects of design development. It explores the issues of operator/user human factors and their impact on design. The outcome of this course will be to ascertain the relationship of basic human dimensions on product design. Subjects include systems reliability, sensory and motor processes, basic research techniques and anthropometric studies.

*Prerequisite: INDD-106 or permission of the instructor*

**IDF511** **6 credits**  
**Interactive Design III**

This studio will explore the translation of the three- and four-dimensional concepts into two-dimensional screen images, interactivity and animation. Students will be introduced to the theory and practice of motion graphic production. The mediums of choreography, filmmaking, architecture, performance art, and music will be discussed as potential sources of inspiration for creating new and powerful forms of digital space and experience. A series of increasingly complex projects will culminate in a more demanding final project.

**IDF512** **6 credits**  
**Interactive Design IV**

This studio will develop the ability of the digital designer to successfully participate within an interdisciplinary team. Students from a variety of majors will work together to develop a final, working prototype of a product, service, experience or publication of their choice that synthesizes their knowledge and skills from the previous studios. The students will develop a final project that demonstrates marketability and successfully functions within the larger community. This is a foundation course that does not count for credit toward the graduate degree.

*Prerequisite: IDF511*

**IDF513** **4 credits**  
**Design V for Industrial Design**

The fifth in a series of eight studios, this course focuses on ideas of designs derived from an understanding of consumer behavior. Emphasis is placed on user needs, ease of use and product culture, without ignoring the practicalities imposed by manufacturer's markets, manufacturing process constraints and investment concerns. Students will demonstrate control of the process of design to develop meaningful concepts that employ appropriate technology for their eventual realization.

*Prerequisite: grade of "C" or better in INDD-202*

**IDF514** **3 credits**  
**Visual Studies: Drawing**

This drawing course emphasizes the understanding of space and alternative approaches for recording and expressing it. Much information in regard to drawing practice will be accumulated during this semester such as mark making skills, developing sensitivity to light and shade, experimentation with media and the use of color as an introduction to figure drawing.

\*This course should not be taken by students who have received credit for DRAW 101 or DRAW 201 in the School of Design & Engineering or the College of Architecture and the Built Environment.\*

**IDF515** **6 credits**  
**Design VI for Industrial Design**

In this sixth of a series of eight studio courses, students design and develop consumer products. Students learn about the complexities of the product-development process, during which assembly

requirements, marketing issues, materials and component development all affect the initial intent of their designs. Students are required to fabricate a fully functional prototype of their designs. A selected team of professionals from the industry will evaluate the final product.

*Prerequisite: grade of "C" or better in INDD-301*

**MBA625** **3 credit**  
**Management Communications and Negotiations**

This course covers the concepts and art of effective management communications and negotiations in the business environment. The total communications process — verbal, nonverbal, presentation, written and electronic — is reviewed in the context of today's work environment. The perspectives and needs of top management, interactive teams, individual contributors, and clients are examined and translated into professional practices. Experiential exercises and class discussions will build participants' understanding of styles and skills in negotiating. Coursework will focus on the uses of power, influence, and negotiating styles, methods of conflict resolution and means of influencing others.

*Prerequisite: all MBF courses or equivalents*

**MBA626** **3 credits**  
**Management in a Global Environment**

This course examines topics relevant to management in global and culturally diverse organizations. Unifying themes such as globalization and sustainability are used to explore organizational change, technology, and ethics and social responsibility. The course also addresses issues such as communication, group dynamics, motivation, leadership, and decision-making in organizations. Readings and cases illustrate managers' dynamic roles and responsibilities with respect to globalization, and within a global environment.

*Prerequisite: all MBF courses or equivalents*

**MBA627** **3 credits**  
**Management of Information Through Technology**

This course will focus on the latest technological advances for managing data and communications effectively. Students will acquire the skills and concepts necessary to use a system to handle data efficiently for large and small organizations, national or international in scope. Network technology and usage of computer networks, as well as ethical and security issues will also be addressed. The concepts of telecommunications and the costs and benefits associated with this transmission of information will be explored. Methods of instruction include hands-on/application orientation.

*Prerequisite: all MBF courses or equivalents*

**MBA628** **3 credits**  
**Accounting for Management Decisions**

This course provides students previously exposed to financial and managerial accounting principles an opportunity to study the structure and use of accounting systems designed to aid management in controlling costs and profits. The course stresses the following: financial statement interpretation as a basis for decision making; cash flow analysis; cash budgeting; cost volume profit analysis; costing and interpretation of manufacturing systems; and the impact of international competition, responsibility accounting and the impact of inflation.

*Prerequisites: all MBF courses or equivalents*

**MBA629** **3 credits**  
**Financial Policy and Planning**



This course focuses on the investment and financing decisions of firms. Topics include capital budgeting, cash management and cash flow analysis, capital structure, dividends and international operations. Financial policy making is considered within the context of contemporary valuation and risk management theories. Various financial planning models are analyzed in the course.

*Prerequisites: all MBF courses or equivalents*

**MBA630** **3 credits**  
**Quantitative Methods in Decisions**

This course will focus on the mathematical models and methods available for use in formulating and analyzing business decision-making problems in industry. Areas of study include: probability theory, decision analysis, game theory, forecasting techniques, project management, queuing models, allocating scarce resources using linear programming and integer-programming techniques, and deterministic and probabilistic inventory models.

*Prerequisite: all MBF courses or equivalents*

**MBA632** **3 credits**  
**Strategic Marketing Management**

This course allows students to develop skills in dealing with strategic marketing problems found in both profit and nonprofit settings. The course presents a framework for developing a strategic marketing plan over the product life cycle with emphasis on consumer and environmental analysis. Market segmentation, product positioning, marketing responsiveness and competitive reaction will be explored.

*Prerequisite: all MBF courses or equivalents*

**MBA642** **3 credits**  
**Strategic Planning in a Global Environment**

This course will focus on the design and implementation of a strategic plan in global industries and the importance of such a plan in dealing with the many challenges facing organizations in the years ahead. Strategic planning models and research findings will be investigated. During the semester, students will analyze strategic threats and opportunities which confront corporate-level executives as well as managers of business units. Students will work in teams on the development of a strategic plan for a local profit or nonprofit organization. The focus will be on developing effective strategies which clarify the future direction of the chosen organization and deal with the rapidly changing environment. Strategic plans will be presented in oral and written form to the organization. This is a capstone course and students will draw from the knowledge they have gained throughout the M.B.A. program. Extensive written individual and team assignments and oral presentations are included.

*Prerequisite: All core MBA courses must be completed or taken concurrently.*

**MBA700** **3 credits**  
**Accounting Theory & Applications I**

An in-depth study of current accounting issues and pronouncements, including long-term debt and troubled debt restructuring, accounting for leases, pension and post-retirement, income tax accounting, price-level adjusted financial statement reporting, and accounting for partnerships (equity, admission, profit and loss sharing, and liquidation).

*Prerequisite: MBA628*

**MBA701** **3 credits**  
**Accounting Theory & Applications II**

A continuation of Accounting Theory & Applications I, including the study of accounting for business combinations (purchases and pooling of interests), accounting for the translation or remeasurement of

foreign subsidiary financial statements into dollars to meet business combination reporting requirements, accounting for transactions denominated in a foreign currency (including purchases, sales, and hedges), and analysis of financial statements.

*Prerequisite: MBA700*

**MBA702** **3 credits**  
**Accounting Information Systems**

Examines the principles of computer-based accounting information systems and their role in the business firm. This course provides an overview of information systems, designing and implementing new system controls and their impact on the decision-making process.

*Prerequisite: MBA701*

**MBA703** **3 credits**  
**Auditing Theory and Philosophy**

A study of the development of financial compliance and operational auditing techniques, including analysis of current issues in the auditing profession such as audit risk, ethical conduct, materiality, audit sampling procedures, and reporting issues. These areas will be studied with reference to pronouncements of the accounting profession and current literature. The study of operational, as well as financial compliance auditing, will be enhanced using case studies and examples.

*Prerequisite: MBA701*

**MBA704** **3 credits**  
**International Accounting Issues**

Examines financial accounting, reporting, and auditing requirements and issues in foreign environments on a comparative basis; current literature on the development of international accounting and auditing standards; and managerial planning and control of multinational firms. The study of international accounting, reporting and auditing standards will be enhanced through the use of case studies comparing the development of these standards in different countries.

*Prerequisite: MBA701*

**MBA705** **3 credits**  
**Issues in Advanced Accounting**

An in-depth study of selected accounting topics, including bankruptcies, estates and trust; SEC reporting; and non-profit accounting for state and local governments, colleges and universities, hospitals and other health care facilities; and other non-profit entities. Course includes case studies, using pronouncements of the Financial Accounting Standards Board, the Governmental Accounting Standard Board, and the American Institute of C.P.A.s.

*Prerequisite: MBA701*

**MBA710** **3 credits**  
**The Global Consumer**

The concept of the global consumer or global brand is one of the most emphasized topics in retailing today. Building and managing a successful product in the international arena is extremely important and strong product marketing is evident in successful global firms such as Volkswagen, HP, Canon, Southwest Airlines and Caterpillar. Students will explore product strategies and learn the key steps of the analytical process to grow a product globally. Key topics include: Global Product Development, Global Services Marketing and Global Branding.

*Prerequisite: all MBA courses or equivalents*

**MBA 711** **3 credits**

### **Global Retailing Marketing Management**

This course is an overview of the retail industry which will provide students with a broad and conceptual understanding of the retail industry in the global economy. The course will include such topics as: overview of the retail industry, structures and strategies, multiple channels of distribution, global consumer, consumer relationship management, financial functions, marketing communications strategies, human resource management, merchandise planning, control and pricing strategies.

*Prerequisite: all MBF courses or equivalents*

#### **MBA712** **3 credits** **Global Supply Chain**

The concept of a global supply chain or global value chain is one of the most emphasized topics in retailing today. Building and managing a successful retail strategy in the international arena is potentially the most challenging and rewarding endeavor an organization can undertake. Students will learn to define measurable objectives and develop strategies to promote supply chain efficiencies, while focusing on key “hot button” areas of management and decision making in today’s international marketplace. Key topics include: out-sourcing and right sourcing strategies; partnering; and the concept of global brands.

*Prerequisite: all MBF courses or equivalents*

#### **MBA714** **6 credits** **Global Product Development**

This course provides methodology for discovering new business opportunities and product road map decisions. It is intended for students with interest in innovative product development, entrepreneurship, and technology development. The course follows an overall product design methodology, where students partake in innovation games and charrette exercises, identify customer needs and generate product concepts, including prototyping and design-for-manufacturing. Weekly student assignments are focused on the design of a new product, and culminate in the creation of a prototype and submission of a business plan.

*Prerequisite: MBA627 and permission of the instructor*

#### **MBA720** **3 credits** **Accounting and Financial Management for Health-Care Institutions**

This course examines accounting and financial concepts as they apply to health care institutions. Financial reporting, cost accounting, fund accounting budgeting and cost benefit analysis are analyzed in the context of health-care institutions.

*Prerequisites: MBF504 and MBF505 or equivalents*

#### **MBA721** **3 credits** **Legal Aspects of Health-Care Management**

This course examines the growing importance of legal matters in health-care management from the administrator’s perspective. Topics include negligence law, medical staff organization, discipline, peer review, patients’ rights, labor law, contract law, legal structure of health-maintenance organizations and a legal view of social issues in the health field.

*Prerequisite: MBF511 or equivalent*

#### **MBA722** **3 credits** **Marketing of Health-Care Institutions**

This course examines the ever-increasing need to apply marketing strategies to health-care institutions. Specific areas of investigation include an examination of the differences between the marketing services provided by health-care organizations versus traditional product marketing, and the application of marketing theories and concepts to the development of successful strategies for health-care organizations.

**MBA723** **3 credits**  
**Managed Health Care**

This course explores the organization and management of health-maintenance organizations and other types of managed-care systems, and looks at alternatives to hospitalization such as HMOs, community-based services and outpatient clinics.

**MBA724** **3 credits**  
**Long-Term Care Administration**

This course explores the administrative and operational issues of services provided in long-term health-care facilities. Issues associated with the care of the elderly population in the U.S., including inpatient and outpatient care, as well as community-based programs, will also be covered. There will be an emphasis on services for the elderly, chronically ill and disabled. Differences between acute and long-term levels of care, types of long-term care facilities and special concerns of the long-term care resident will be covered.

**MBA725** **3 credits**  
**Emerging Health Issues**

This course provides an in-depth study of current topics in health care. Topics to be explored will be announced when the course is offered and may include health-care reform, ethical issues in health care, world-wide and local social gerontology issues and labor relations in health care.

**MBA726** **3 credits**  
**Health-Care Risk Management**

This course provides students with an overall understanding of the various responsibilities and issues important to health-care risk managers. The course will explore the elements of an effective risk-management program and specific risk-management areas, including learning how to identify and control risk from a variety of perspectives. Course content will include legislative and regulatory concerns; risk management; interaction with the board of trustees, medical staff, nursing staff and others within and external to the health-care setting; contract review; employment issues and record keeping.

**MBA740** **6 credits**  
**International Business**

By focusing on all aspects of conducting business in a global environment, this course will acquaint students with the theories, concepts, practices and techniques in conducting business abroad. A strong emphasis is placed on cultural, ethical and political issues as their impact on managing multinational operations. A required overseas trip will expose students to a number of foreign cultures and businesses. Students will spend approximately two weeks meeting with business, government and labor leaders, as well as academicians in European or Asian countries. Teaching methods include lectures, case analysis, simulations, role playing and significant current outside readings. Offered in spring semester only.

Operational details: If a student misses the scheduled trip, the student will receive an “I” for the course and must go on the next available trip. If the trip is completed but the course is failed, a student must repeat MBA740 (excluding the trip) for three credits and take another elective or repeat the entire course including the trip. The cost of the overseas trip is not included in the tuition for this course.

*Prerequisite: All foundation courses*

**MBA741** **3 credits**  
**Financial Accounting & Reporting I**

An in-depth study of current accounting issues and pronouncements, including long-term debt and troubled debt restructuring, accounting for leases, pension and post-retirement, income tax accounting, price-level adjusted financial statement reporting, and accounting for partnerships (equity, admission, profit and loss sharing, and liquidation).

*Prerequisite: MBA628*

**MBA742** **3 credits**  
**Financial Accounting & Reporting II**

A continuation of Financial Accounting & Reporting I, including the study of accounting for business combinations (purchases and pooling of interests), accounting for the translation or remeasurement of foreign subsidiary financial statements into dollars to meet business combination reporting requirements, accounting for transactions denominated in a foreign currency (including purchases, sales, and hedges), and analysis of financial statements.

*Prerequisite: MBA741*

**MBA743** **4 credits**  
**Audit and Attestation**

A study of the development of financial compliance and operational auditing techniques, including analysis of current issues in the auditing profession such as audit risk, ethical conduct, materiality, audit sampling procedures, and reporting issues. These areas will be studied with reference to pronouncements of the accounting profession and current literature. The study of operational, as well as financial compliance auditing, will be enhanced using case studies and examples.

*Prerequisite: MBA742*

**MBA750** **3 credits**  
**Information Architecture**

In this course, students will learn the definition of information architecture (IA), how IA fits into the overall software development process and the critical steps and deliverables for IA. First, students will conduct user research and develop user profiles/persona, which will help define the target user for their website. Next, students will map out high-priority user scenarios based on both the user’s needs and the business/organization goals. Next, students will develop the information architecture for a website and produce a site-map diagram. Once the site map is complete, students will build a “clickable” wireframe prototype and task script that will be used for usability testing. Finally, students will produce a full set of wireframes for their website incorporating all the learning from user research and usability testing.

**MBA751** **3 credits**  
**Management of Technological Change**

Technological change is widespread within and among today’s organizations. This course will examine the effects of that change on organizations and their members. The academic and professional literature describing the influence of technological change on organization structure, group processes and individual workers will be reviewed and analyzed. Participants will examine an assortment of techniques

for avoiding the productivity declines sometimes associated with the introduction of new technology. These tools include task design, training, reward system, worker participation, leadership development and other techniques.

*Prerequisite: all MBF courses or equivalents*

**MBA752** **3 credits**  
**Total Quality Management**

Total Quality Management (TQM) embraces a certain philosophy, practices, tools and standards for continuous improvements of process, product and people. Lecture and discussion topics include the introduction to quality control and the total quality system; philosophies and their impact on quality management: practices, tools and standards; fundamentals of statistical concepts and techniques; graphical methods of data presentation; statistical process control; acceptance sampling; reliability; experimental design and the Taguchi Method and quality in the service sector. Assignments include problems and reports.

*Prerequisites: MBA630 or equivalent and all MBF courses*

**MBA757** **3 credits**  
**Management of Innovation and Entrepreneurship**

This interdisciplinary seminar focuses on the sources of change and innovation in the business environment and strategies for managing change, especially in dynamic environments. The seminar will review the impact of technological innovation as well as social, economic and cultural change on management strategy. Topics include a systems framework for understanding the types of change, purposeful entrepreneurship, reframing as a change management tool and the practice of innovative leadership in diverse organizational settings.

*Prerequisite: MBA626*

**MBA758** **3 credits**  
**International Perspectives of Human Resource Management**

This course introduces students to the key principles, concepts and techniques involved in identifying and solving people-related business problems in international enterprises. Strategic thinking and environmental-scanning skills will be developed and applied beyond national borders through lectures, discussions, interactive exercises, cases and projects. The impact on management practices and strategies of culturally based differences in values and attitudes will also be examined. The course will focus on critical human-resource issues of special interest to today's transnational careers, selection of expatriates, repatriation, and global succession planning, management education, training and development.

*Prerequisite: MBA626*

**MBA759** **3 credits**  
**Entrepreneurship**

This course will provide an overview of the major elements of entrepreneurial activity including planning and evaluation of the business, financing, typical operating and administrative issues and alternatives for growth and sale. Entrepreneurial opportunities and challenges will be examined and a variety of venture opportunities will be analyzed. The course will give students a realistic look at the challenges involved in starting a viable business and help students in a personal evaluation of their own skills, talents and career potential. Utilizing business planning software, each student will prepare a comprehensive business plan for a business opportunity the student selects and perceives to be viable and practical. The plan may be utilized for presentation to potential investors.

*Prerequisite: All foundation courses*

**MBA761** **3 credits**  
**Promotion Management**

This course focuses on the promotion and communication decisions of corporations and how to employ promotion strategy to solve marketing problems and enhance opportunities. Advertising, sales promotions, publicity, public relations and personal selling are investigated.

*Prerequisite: MBA632 or equivalent and all foundation courses*

**MBA762** **3 credits**  
**Marketing Research**

This course focuses on the collection and use of data to support marketing decisions. Students will learn how to formulate the research problem, design the research and collect the data. Various techniques used for analyzing data will be examined. Students will be required to conduct a research study during the semester.

*Prerequisites: all MBF courses or equivalents and MBA632 or equivalent*

**MBA764** **3 credits**  
**Global Marketing**

This course examines the challenge of entering and operating effectively and efficiently in international markets. The impact of macroenvironmental factors (cultural, legal, political, etc.) on the development of marketing strategies for both consumer and industrial products will be discussed. Students will explore to what extent an organization should follow a country-specific marketing strategy as opposed to a global strategy.

*Prerequisite: MBA632 or FAS731 or equivalent*

**MBA766** **3 credits**  
**Business-to-Business Marketing**

Marketing of goods and services to organizations including industrial firms, service organizations, producers of consumer goods, government institutions and retail trade is explored. Characteristics of these markets, and techniques and processes used to effectively reach these markets, are investigated. The course focuses on organization buying behavior, buyer and seller relationships, market analysis and planning, and the development of marketing strategies.

*Prerequisite: MBA632 or equivalent and all MBF courses*

**MBA771** **3 credits**  
**Financial Markets and Institutions**

In this course, students will study money and capital markets and the managerial and environmental problems facing these markets, including regulation and supervision by government.

*Prerequisite: MBA629 and all MBF courses*

**MBA772** **3 credits**  
**Investment and Portfolio Management**

This course will acquaint the student with the tools essential for sound money management. Investment management begins by considering the goals of an investor with respect to risk exposure, the tax environment, liquidity needs and appreciation versus income potentials. Strategies will be developed to satisfy these objectives. Special attention will be paid to the theories of determinants of asset prices, including the capital-asset pricing model.

*Prerequisite: MBA629 and all MBF courses or equivalents*

**MBA774** **3 credits**

## **International Finance**

This course will examine international financial economics and the international financial system, with emphasis on the theories, techniques and practices relevant to international financial management. Topics include balance of payments, foreign exchange markets and risk, cash flow operations and portfolio effects of capital budgets for multinational and international capital markets. Students will explore problems involved in the financial management of multinational firms including environmental problems; organizing for optimal results; sources and uses of funds; and accounting, tax and control issues.

*Prerequisite: MBA629 and all MBF courses or equivalents*

### **MBA775** **3 credits**

#### **Seminar in Finance**

This course will address a number of developments in contemporary finance, such as mergers, acquisitions, divestitures, leveraged buy-outs and equity and debt financing. Non-traditional financing methods will also be explored.

*Prerequisite: MBA629 and all MBF courses or equivalents*

### **MBA776** **3 credits**

#### **Speculative Markets**

This course is intended to introduce students to financial futures, options and swaps. The objective of this course is to clearly explain why these securities exist and how to accurately price them. The course will present a balance of the institutional details, theoretical foundations and practical applications of this field.

*Prerequisites: MBA629 and MBA772 and all MBF courses or equivalents*

### **MBA777** **3 credits**

#### **Fixed Income Securities**

This is a highly specialized course that focuses on the fixed income market with emphasis on the bond market. Topics include pricing of bonds, bond price volatility, types of fixed income securities, term structure of interest rates and bond portfolio-management strategies. Various fixed income products are analyzed in the course, including some derivative products in the context of fixed-income securities.

*Prerequisite: MBA629 and all MBF courses or equivalents*

### **MBA778** **3 credits**

#### **Commercial Banking**

This course provides an overview of the history of banking progressing to the banking of today. Banking is the management and evaluation of risk and the balancing of the need for profitability with the safety and soundness required by the community. This course explains the rationale behind the making of loan and asset/liability-management decisions. It surveys the effect of the technological changes of the past ten years on the delivery channels for banking services. Topics for discussion include competition and the mix of banking, insurance and investment banking. The focus of the course will be on management concepts, as opposed to actual formulas and calculations. Projects and case studies will assist participants in gaining a working knowledge of banking decision making.

*Prerequisites: all MBF courses or equivalents*

### **MBA780** **3 credits**

#### **Fundamentals of E-Commerce**



This course provides an overview of the framework for conducting business in a digital value chain environment. The impact of information technology on the delivery of goods and services and the resulting infrastructure, cultural, organizational and environmental factors will be examined. Participants will develop an awareness of the range, scope and complexity of the issues and an understanding of the technical concepts of electronic commerce to gain a competitive advantage. Topics will include electronic payment issues, copyright protection, governmental regulations, taxing structures, pricing and product strategies, and market and product development in electronic commerce systems.

*Prerequisite: all MBF courses or equivalents*

**MBA791** **3 credits**  
**Internship**

Internships provide students with an opportunity to apply and further develop the knowledge they have gained in the classroom. Under faculty supervision, students work in salaried positions related to their career goals. While on their assignments, students develop meaningful learning objectives, attend an internship seminar, complete challenging assignments, and write bi-weekly reports analyzing articles in academic journals and practitioner publications.

Prerequisites: Minimum of 18 graduate credits completed (excluding foundation courses); available to full-time students only and subject to availability and eligibility; permission required, please see program director or Career Services Office for more information.

**MBA792** **3 credits**  
**International Business Trip**

The focus of this course is visiting representatives of U.S. and non-U.S. businesses in various industries abroad. The international business trip will span approximately two weeks. Students will meet with business executives, government officials, labor leaders and academicians in specific industries abroad. Students will gain an appreciation for both the formal business aspects and informal social aspects of conducting commerce in foreign countries.

*Registration requires permission of the Graduate Studies Office.*

**MBA797** **1-3 credits**  
**Selected Topics**

Content will vary in response to current issues.

**MBA798** **3 credits**  
**Independent Study**

This course provides students with an opportunity to pursue areas of interest while working jointly with a faculty member. Subject to availability and approval. See appropriate form online on the University Registrar's web page <http://www.philau.edu/registrar/> for more information.

**MBF503** **3 credits**  
**Foundations of Economic Analysis**

This course introduces key economic concepts and tools for managers in the public, private and not-for-profit sectors. By applying economic theory to business problems, managerial economics develops general principles that can be applied to business decision making. Topics include the goal of the firm, decision-making techniques, marginal analysis, classical optimization, demand analysis, forecasting techniques, production and cost analysis, price determination and market structure. The role

of government to provide a stable institutional environment, as well as the consequences of regulations, will also be covered. This is a foundation course that does not count for credit toward the graduate degree.

**MBF504** **3 credits**  
**Introduction to Financial and Managerial Accounting**

A course designed to introduce students to the fundamentals of financial and managerial accounting. The course introduces the use of accounting information as a basis for planning, control and managerial decisions. This is a foundation course that does not count for credit toward the graduate degree.

**MBF505** **3 credits**  
**Financial Management**

A survey of the principles and techniques of business financial management including the analysis of working capital, capital investments and sourcing for funds. Time value of money concepts, return and risk analysis and income taxes are considered. This is a foundation course that does not count for credit toward the graduate degree.

*Prerequisite: MBF504 or equivalent*

**MBF506** **1.5 credits**  
**Marketing Foundations**

This course is designed to provide the student with a broad understanding of the various marketing functions of an organization including the development, introduction, promotion, pricing and distribution of goods, services and ideas. Topics covered include consumer behavior, marketing research, segmentation, target marketing and new product development. This is a foundation course that does not count for credit toward the graduate degree.

**MBF508** **3 credits**  
**Statistical Analysis for Business Decisions**

Descriptive statistical measures and probability theory are combined to provide the basis for statistical decision-making techniques. Areas covered include: measures of central tendency, measures of variability, hypothesis testing and confidence intervals, one- and two-way analysis of variance, Chi-squares and non-parametric statistical techniques. This is a foundation course that does not count for credit toward the graduate degree.

*Prerequisite: MBF501 or equivalent*

**MBF509** **1.5 credits**  
**Management Concepts**

Effective management is fundamental for the successful operation of all types of enterprises. The course will present the principles, techniques and concepts needed for managerial analysis and decision making. Functions highlighted include planning, organizing, staffing and controlling. This is a foundation course that does not count for credit toward the graduate degree.

**MBF510** **3 credits**  
**Operations Management**

This course is designed to provide students with an understanding and working knowledge of the latest quantitative tools needed to participate in, contribute to and enhance the corporate decision-making process. The focus of the material will be on the use and application of quantitative skills without the theoretical detail. Topics covered will include quality-control applications, optimization techniques (including linear programming), simplex method, transportation model and assignment model. Other

topics are: time-series analysis, queuing theory and an introduction to total quality management. Computer applications, case analysis and problem-solving sets will be used extensively throughout the course. This is a foundation course that does not count for credit toward the graduate degree.

*Prerequisites: MBF501, MBF508 or equivalents.*

**MBF511** **3 credits**  
**Decision Making in the Legal Environment of Business**

Lecture, class discussions and case problems emphasizing the basic legal principles on the following topics: legal rights and social forces, contracts, partnerships, agency and employment, commercial paper and real property. This is a foundation course that does not count for credit toward the graduate degree.

**MCM600 (formerly MCM610)** **3 credits**  
**Construction Estimate and scheduling**

Utilizing pertinent case studies, this course focuses upon the planning and scheduling stages of the building process, with particular emphasis upon reading construction documents and basic estimating principles applied to small-scale, residential and commercial projects. Construction site procedures, as well as techniques for estimating unit quantities and costs of materials, labor and equipment, are introduced, and given industry application utilizing building specifications and computer software.

**MCM602** **3 credits**  
**Construction Information Modeling**

Technological advances within the construction industry demand that today's managers possess proficiency in current building methodologies and literacy in current computer software. This course concentrates upon the use of sustainable construction methods and materials to produce cost-effective projects with emphasis upon resource efficiency, environmental protection and waste minimization. Innovative methods of documentation and digital techniques, principally Integrated Practice and Building Information Modeling (BIM) are given comprehensive coverage, relative to the application of the software to the actualization of the built form.

**MCM603** **3 credits**  
**Construction Law: Roles and Responsibilities**

Current legal problems associated with the construction industry are investigated from management's perspective through consideration of the roles assigned to the various project participants. The entire building process from pre-design to owner use is scrutinized, highlighting case law and statutory information, contractual relationships, licensing issues, design through build, bidding and procurement rules, mechanics liens, insurance and surety bonds, and liability awareness. Available methods of dispute resolution are evaluated, including negotiation, mediation, arbitration, and litigation with emphasis upon claim avoidance.

*Prerequisites: MCM-600, MCM-602, or permission of Program Director*

**MCM604** **3 credits**  
**Project Finance and Cost Control**

Utilizing pertinent case studies, this course probes the economics of construction and analyzes project control systems used to effectively manage cost and time. Principles drawn from cognate business fields, specifically accounting, finance, and taxation, are given real-life application relative to construction projects of multiple types and scales. Key budgetary issues are examined in-depth, including financial statements and balance sheets, variance analysis and optimum cash flow methods, as

well as efficient cost reporting systems. Additional topics include internal controls, financial analysis and presentation, contractor surety and lending, and fraud, with particular emphasis upon cost-effective methods to procure and deliver construction projects including lump sum, unit price, cost-plus, and design-build.

*Prerequisites: MCM-600, MCM-602, or permission of Program Director*

**MCM606** **3 credits**

**Construction Risk Management**

This course examines the key concepts, models, codes, tools and techniques used in managing risks within the architecture, construction and engineering industries. The course will focus on planning for the effective implementation of the risk management process, identification and qualitative and quantitative assessment of risks, appropriate strategies to respond to risks, and how to sustain the risk management process throughout the life of a construction project.

*Prerequisites: MCM-600, MCM-602, or permission of Program Director*

**MCM608** **3 credits**

**Construction Environmental Management**

This course examines the key concepts, systems, laws, tools and techniques used in managing environmental risks within the architecture, construction and engineering industries. The course will focus on environmental issues from a construction business management perspective and include analytical techniques, management processes and business strategies that aid successful reconciliation of environmental and economic performance goals for construction operations. Through a combination of real-life cases, readings, lectures, videos, and simulations, class sessions will seek to engage students in discussions aimed at developing systems of corporate environmental management, covering compliance, environmental risk management, pollution prevention, product stewardship, supply chain management, and communication.

*Prerequisites: MCM-600, MCM-602, or permission of Program Director*

**MCM612 (formerly MCM601)** **3 credits**

**Advanced Construction Project Management**

Through detailed case studies drawn from contemporary practice, this course provides in-depth study of the principles and methods critical to the management and integration of the design and construction processes. Planning, scheduling, bidding, professional/client relationships, and contractor selection. Theoretical and practical aspects of project planning are charted, incorporating such essential steps as feasibility studies, estimating project costs, cash flows and cost control through critical path methodologies, risk analysis methods and current techniques for value engineering.

**MCM791** **1 credit**

**Construction Management Internship**

To ensure competency in the field before graduation, each student must complete 400 hours of professional construction management experience with a firm in the building industry. This requirement may be waived for entering students with equal or greater professional experience. Additional requirements may apply, *see program director or Career Services Office for more information.*

*Prerequisite: MCM 602, MCM-603, MCM-604*

**MCM901** **3 credits**

**Masters Project**

Construction managers today are part of a team-oriented enterprise, working in collaboration with architects, clients, developers and sub-contractors in the conceptualization and realization of the built environment. This independent study serves as the culminating experience in the program and requires the student to translate the design intentions of the architect and the expectations of the client into sustainable built form. Working in consultation with a committee of academic and professional advisors drawn from both architecture and construction, the student must choose a specific project and produce a comprehensive manual that addresses design concerns, sustainable systems and materials, construction methodologies as well as financial, legal, and safety standards operative in each phase of the construction process. An oral defense, supported by visual documentation realized via relevant digital technologies, will be presented for review and critique by a jury of committee members, faculty and students.

*Prerequisites: MCM 602, MCM-603, MCM-604, MBA-625, SDN-601, SDN-603*

**MMW712** **3 credits**  
**Introduction to Health Policy**

The focus of this required course is federal health-policy development, analysis and implementation and the role of the health-care provider in influencing health policy in the United States. The student will study public health policy to understand the basics of the policy-making process and to attain a beginning knowledge of how to influence health policies. The course will focus on women's and infants' health issues as examples of broader issues in health policy.

**MMW720** **3 credits**  
**Critical Inquiry I**

Critical Inquiry I is a required course that provides the foundations of research and critical inquiry as it applies to the evaluation of scientific evidence. The course will cover the following areas: the scientific method and its limitations; multiple ways of knowing; the ethics of research; defining problems, questions and hypotheses; conceptual analysis, constructs and theory building as they pertain to clinical practice and research. The course will provide an overview of the research process, and the student will apply this knowledge in the development of Chapters 1 and 2 of a research proposal. Midwifery contributions to the scientific literature will be highlighted as examples.

**MMW721** **3 credits**  
**Critical Inquiry II**

Critical Inquiry II is a required course that provides a special focus on research methods and their applications in clinical research and evidence-based practice. Steps in developing a research proposal, a research report and an evidence-based clinical protocol are presented. Students will be expected to continue their work on a problem or question relating to midwifery practice and/or women's health, critically analyze the literature, place the issue in a theoretical context and develop an appropriate methodology to study the issue. Students may prepare a research proposal, a manuscript for publication, a grant proposal or an evidence-based clinical protocol for the final project. Or, the student may serve as a research apprentice to an experienced researcher working on a midwifery or women's health issue or as an intern to a national midwifery organization working on research-related projects that advance the profession of midwifery. Students may elect to continue their research and complete a thesis in a three-credit elective course.

*Prerequisite: MMW720*

**MMW722** **3 credits**  
**Introduction to Clinical Administration**

This elective course provides students with the knowledge to understand the factors that influence the success and viability of nurse-midwifery practices. The effects of the changing health-care environment on primary health-care providers will be explored. Particular attention will be paid to current issues in the health-care system. The course will examine the startup of a clinical practice either as an entrepreneurial entity or within an existing organization. Emphasis will be placed on a beginning understanding of financial accounting statements and business plans used in the health-care industry. Students will explore the influence of political/economic milieus within and around the practice organization. In addition, students will learn practical techniques in order to develop beginning abilities in conflict resolution and contract negotiation.

**MMW723** **3 credits**  
**Advanced Clinical Practice**

This elective course is a guided independent study in advanced clinical practice. In consultation with the faculty, the student will identify a specific area of clinical practice (for example, caring for women with gestational diabetes). Intensive, focused study in this content area will be facilitated. Experiences relevant to the student's area of interest will be sought in the clinical setting. Reflection on the student's own transformation from novice to expert will be included.

**MMW724** **3 credits**  
**Introduction to Teaching Methods**

This elective course provides an introduction to teaching methods useful for midwifery educators in academic and clinical settings. Fundamentals of adult education will be reviewed. Concepts particular to midwifery education will be explored. Examination of how to identify and reach educational goals will be included for traditional models, distance education and in the clinical setting. The process of identification of student learning issues and problem solving will be included.

**MMW725** **3 credits**  
**Issues in Reproductive Health in Developing Nations**

This course will present current trends and the range/impact of problems in reproductive health in the developing world. Students will explore the context and consequences of reproductive health problems, common intervention strategies, and the critical role of health-care consultants to developing countries. The class will gain an understanding of the appropriate preparation, roles and responsibilities of international health-care consultants. As an outcome of this course, the student will be prepared to predict the potential impact of unmet reproductive health care needs in developing countries and evaluate proposed interventions.

**MMW931** **3 credits**  
**Thesis**

Students may elect to conduct their own research and complete a thesis under faculty guidance using the most current Philadelphia University Guide For The Preparation Of Doctoral Dissertation And Master's Theses document. This elective course will be based on the proposal written in Critical Inquiry II.

*Prerequisite: MMW721*

**MSID500** **3 credits**  
**Skills and Methods for Industrial Design**

An intensive summer workshop for matriculating industrial design graduate students. This course covers basic principles of design process and user research and goes on to cover shop and prototyping issues,

as well as basic materials and process selection for manufacturing. A short-term design project is part of the course, but this class focuses on techniques and skills rather than the objects designed.

**MSID600A** **1 credit**

**Intercultural Innovation: Study Abroad Component**

During a short interdisciplinary elective experience in a foreign country, students will observe and document cultural and demographic difference between countries through formal lectures, field observations and team exercises. The work in this class is informed by the use of user-based observational research techniques, which students will adapt and propose. Documentation is brought back to the US for use in the MSID-600B Intercultural Innovation: Interdisciplinary Project Component class. Students should plan on taking BOTH classes.

**MSID600B** **2 credits**

**Intercultural Innovation: Interdisciplinary Project Component**

*This is the second in a two-course interdisciplinary elective sequence. This class builds on work done in the MSID-600A Intercultural Innovation: Study Abroad Component course. Students should plan on taking BOTH classes. In MSID-600B, students bring research by interdisciplinary teams outside the US into well-documented opportunities for new products, business platforms or systems. In a series of team meetings and design critiques, they then turn them into cohesive proposals including both design and business elements.*

**MSID700** **3 credits**

**Research and Design Process Methods**

This course gives students the tools they need to find and frame opportunities, construct successful design briefs and to evaluate design in progress, as well as exploring and documenting new research techniques and defining basics of professional practice. Class projects will support studio work, as well as contributing to ongoing research initiatives.

**MSID 701** **3 credits**

**Practice Tutorial**

This course addresses specialized topics in professional practice relevant to graduate industrial design students. These include current approaches to intellectual property, professional ethics, contracts, management practices, and structures of practice and employment in the field.

In addition, students research fields within industrial design to identify potential career paths, plan and execute individual strategies for networking and interviewing, and prepare portfolio deliverables and other self-promotion materials in consultation with faculty and guest critics.

**MSID703** **6 credits**

**User Centered Design**

This course is the first in the MSID studio sequence. This studio concentrates on user-centered design techniques, including observational/ethnographic research methods and methods incorporating users and other stakeholders into the design process. Each studio will be expected to do extensive generative research and to publicize/archive its research and conclusions.

Prerequisite: MSID500

**MSID 704** **3 credits**

**Workshop: Interactive Prototyping**

This course addresses the need by industrial design professionals to create interactive, intelligent systems comprising both hardware and software components, to test, iterate, assess and defend these solutions based on principles of cognitive and physical human factors, and to create prototypes for evaluation through rapid-prototyping methods and technologies.

Through quick, iterative prototyping and testing of interfaces based on simple microcontrollers, this class teaches basic programming, integration of electronic sensors and outputs into tangible interfaces, and principles of testing and cognitive ergonomics for use in assessment of interactive interfaces.

**MSID 705** **6 credits**  
**Collaborative Innovation Studio**

This course is the second in the MSID studio sequence. This studio provokes interdisciplinary activity through a project centered on designed systems, which requires industrial design but requires inputs from other disciplines. Types of projects might include: ID + corporate brand experience, ID + materials science product development, products of service/business platform design, entrepreneurial design (design + business plan), software/hardware systems.

Prerequisite: MSID703

**MSID 707** **3 credits**  
**Current Issues In Industrial Design**

In this class, students map and discuss the major influences on industrial design today, as well as modeling the lifetime learning and assessment of theory that are necessary for effective professional design and critique. The class is a seminar and is thematic rather than historical in focus. The reading list is expected to include blogs and periodicals, as well as books, and will change frequently.

**MSID 791** **.5-3 credits**  
**Internship**

This course allows students to pursue direct experience in a company or organization that is actively engaged in design-related work. Students augment and enrich their overall education at the University by learning through direct work experience on design projects. Permission required, see program director or Career Services office for details.

Prerequisite: MSID 705

**MSID 798** **3 credits**  
**Independent Study**

This course will allow students to pursue individual areas of interest while working jointly with a faculty member. Enrollment is subject to the availability and approval of both the program director and faculty member. The student must have 18 or more graduate-level credits, and a prospectus of the proposed independent study must be approved at least one month prior to registration. See appropriate form available online at Registrar's website, <http://www.philau.edu/registrar/>.

**MSID 803** **6 credits**  
**Master's Project 1: Implementation**



The 2-semester Master's project sequence stresses the importance of iterative prototyping and evaluation in current design practice by devoting two semesters to the ID Master's Project. In this first project semester, students begin work with a team of collaborators within and outside the University.

Students have weekly progress critiques with studio faculty and other students, as well as regular meetings with outside project stakeholders. The semester concludes in a progress presentation with outside critics.

Prerequisite: MSID705

**MSID 804** **6 credits**  
**Master's Project 2: Development and Evaluation**

The MSID master's project sequence includes two courses. In this second semester, students work with collaborators and critics/clients within and outside the University to develop, detail and revise designs to a professional level, and to test their performance in the real world. Activities include weekly critiques with studio faculty and other students, as well as meetings with outside project stakeholders. The semester concludes with in-person defense of the work and a display at the CDEC Spring Design Show.

Prerequisite: MSID803

**OCC610** **1 credit**  
**Portfolio Seminar**

This course presents the concept of a professional portfolio, the initial step in guiding students' professional development and socialization into the occupational therapy discipline. Students are introduced to the concepts of self-reflection and self-assessment, and are guided in the process of developing growth activities leading to individual competencies. Through class activities and assignments with their portfolio clients, students learn how to interview, develop a therapeutic rapport, and construct a client profile.

*Prerequisite: All admissions prerequisite coursework*

**OCC611** **3 credits**  
**Foundations for Practice**

Overview of occupational therapy theory and domains of practice, including practice roles and functions, regulatory and legislative mandates and constraints, historical and philosophical foundations, and ethics.

*Prerequisite: All admissions prerequisite coursework*

**OCC613** **4 credits**  
**Functional Anatomy**

This course provides students with knowledge of structure and function of the human body and lays the foundation for an understanding of biomechanical and kinesiological concepts as they relate to human movement.

Classroom and applied experiences address typical development of gross and fine motor skills, and concepts of motor control and motor learning through goniometry, manual muscle testing, and movement analysis. Overview of occupational therapy domains of practice, including practice roles and functions, regulatory and legislative mandates and constraints, historical and philosophical foundations, ethics, the therapeutic relationship, and the professional socialization process

*Prerequisite: All admissions prerequisite coursework*

**OCC616** **2 credits**

## **Assistive Technology Design**

Working with students from the Industrial Design program, students collaborate to design an assistive device or tool to facilitate a client's occupational performance. Through field experiences, teaching-learning activities, discussion, and experiential assignments, students examine their evolving understanding of occupation, adaptation, and participation. Course activities include applying the principles of task analysis and universal design, and critically analyzing and synthesizing evaluation data. The culminating course project assists students to gain professional development experience and insight through the presentation of findings in a consumer-oriented forum.

*Prerequisite: OCC611*

**OCC621** **3 credits**

### **Occupational Competence**

Historical exploration into the nature of humans as occupational beings throughout the lifespan. Focus on occupational performance analysis, and occupation-based goal setting and intervention planning to promote an individual's occupational competence. Impact of physical, social and cultural environments on occupational choice and the ability of individuals to adapt to environmental demands are presented.

**OCC623** **4 credits**

### **Applied Neuroanatomy**

In-depth exploration of the neuroanatomical, neurochemical, neurophysiological, cognitive, motor and sensorimotor basis of brain function as it relates to human performance. Identification of major structures and functions of normal and abnormal nervous systems. Development of an understanding of the neurobiological substrates of behavior and learning. Particular emphasis is placed on the relationship of neuroanatomy to human movement, problem solving and executive functions.

*Prerequisites: OCC613*

**OCC625** **1 credit**

### **Clinical Skills A**

Students learn clinical skills most typically used in various practice contexts of occupational therapy. Course includes development of competencies in safe clinical practices, occupational therapy terminology, and documentation for skilled occupational therapy service. Skills are practiced in hands-on laboratory environments and then applied through Level I Fieldwork.

**OCC 626 (formerly OCC744)** **3 credits**

### **Evidence-Based Practice**

This course helps students to become skillful consumers of research for the purposes of evidence-building and assessing outcomes of occupational therapy. Students are introduced to the research perspective and evidence-based practice as a basis for professional competence. Utilizing the critical appraisal process, students critique and analyze the literature to answer clinical practice questions. Course experiences include examining the basic research elements of single subject, experimental, quasi-experimental and qualitative research studies; considering ethical issues of research; developing and answering complex clinical questions; and planning, presenting and disseminating research findings.

*Prerequisite: OCC611*

**OCC628** **1 credit**

### **Introduction to Evaluation**

Occupational therapists use the evaluation process to develop a clear understanding of a client's occupational performance issues. The process sets the stage for client-centered practice by establishing strengths, needs, goals, and barriers to client functioning. Therapists use evaluation results not only for treatment planning, but also to communicate with clients, caregivers, other professionals and payers. This course will help students to select, critique and project evaluation clinical utility. Course content will also address how evaluation leads to OT intervention. Course content will be delivered in both on-line and in-class format. (1 credit; delivered primarily online)

**OCC635** **1 credit**  
**Clinical Skills B**

Students learn clinical skills most typically used in various practice contexts of occupational therapy. Course includes development of competencies in safe clinical practices for mobility devices, monitoring and documenting vital signs, adherence to cardiac precautions, adapted self-care activities, joint protection and energy conservation. Skills are practiced in hands-on laboratory environments and then applied through Level I Fieldwork.

*Prerequisite: OCC625*

**OCC645** **1 credit**  
**Clinical Skills C**

Students learn clinical skills most typically used in various practice contexts of occupational therapy. Course includes development of competencies in safe clinical practices for physical agent modalities (PAM), fabrication and application of splinting devices, and wound care. Skills are practiced in hands-on laboratory environments and then applied through Level I Fieldwork.

*Prerequisite: OCC613*

**OCC735** **1 credit**  
**Level I Fieldwork A**

The overall purpose of the fieldwork experience is to provide students with exposure to clinical practice through observation and active participation in the evaluation and treatment process. The opportunity to work with clients and therapists helps students to examine their reactions to clients, themselves and other personnel while integrating academic learning with clinical practice. The focus of the learning experience will be the application of knowledge and skills learned through coursework to include observation, written and verbal communication, professional behavior, individual and group participation with patients and clients, and beginning level assessment and intervention. At the completion of Level I Fieldwork experiences the student will demonstrate beginning-level competency on a series of clinical skills.

*Prerequisite: OCC621, OCC625*

**OCC738** **5 credits**  
**Psychosocial Interventions**

Occupational therapy assessment and intervention approaches as they apply to individuals whose lives have been affected by developmental delay, disease, trauma and/or disability are explored. Students will link theory to an in-depth analysis of the social and psychological properties of intervention strategies. Course content will incorporate consultative models, documentation strategies and client and caregiver teaching methods.

*Prerequisites: OCC621*

**OCC741** **3 credits**  
**Interpersonal Relations and Groups**

Interpersonal communication and relationship theories and information related to the dynamics of collaborating with others including OTA, members of the multidisciplinary team, patients and their families are explored. Strategies for using the self as a therapeutic agent, and teaching and empowering patients, families and caregivers, are discussed.

*Prerequisite: OCC621*

**OCC745** **1 credit**  
**Level I Fieldwork B**

The overall purpose of the fieldwork experience is to provide students with exposure to clinical practice through observation and active participation in the evaluation and treatment process. The opportunity to work with clients and therapists helps students to examine their reactions to clients, themselves and other personnel while integrating academic learning with clinical practice. The focus of the learning experience will be the application of knowledge and skills learned through coursework to include observation, written and verbal communication, professional behavior, individual and group participation with patients and clients, and beginning level assessment and intervention. At the completion of Level I Fieldwork experiences the student will demonstrate beginning-level competency on a series of clinical skills.

*Prerequisite: OCC621, OCC625*

**OCC748** **5 credits**  
**Assessment and Intervention: Adults**

Occupational therapy assessment process and intervention approaches as they apply to individuals whose lives have been affected by disease, trauma and/or disability with primary focus on physiological, musculoskeletal or neurological impairments and medical conditions. In-depth analysis of the physical, social, cognitive and psychological properties of intervention strategies. Hands-on techniques, documentation strategies, patient/client and caregiver teaching and theoretical constructs are explored. This course focuses on assessment and intervention strategies that primarily address musculoskeletal or neurological impairments and medical conditions. Students will learn the historical and theoretical basis for a variety of assessment tools and intervention strategies.

*Prerequisites: OCC613, OCC621, OCC623*

**OCC751** **3 credits**  
**Professional Issues and Trends**

In-depth examination of issues affecting practice, reimbursement, role delineation, professional autonomy and the changing human services system in the United States. OT-specific issues regarding ethics, staff development, program evaluation, research, patient advocacy and health policy will be addressed. Strategic and program planning, program design and implementation, legislative imperatives, resource utilization and use of outcomes data for program planning and justification are presented.

*Prerequisites: two of the following: OCC611, OCC748, OCC73, OCC748, OCC738*

**OCC754** **3 credits**  
**Environmental Dimensions of Occupation**

In-depth exploration of the physical, perceptual, psychological and social dimensions of the environment. Impact of the environment on behavior and the individual's ability to mount an adaptive response will be examined. Students will complete an environmental assessment and will learn to design and construct environmental adaptations. Historical and theoretical basis for physical and social adaptations is explored.

*Prerequisites: OCC 613, OCC621*

**OCC755****1 credit****Level I Fieldwork C**

The overall purpose of the fieldwork experience is to provide students with exposure to clinical practice through observation and active participation in the evaluation and treatment process. The opportunity to work with clients and therapists helps students to examine their reactions to clients, themselves and other personnel while integrating academic learning with clinical practice. The focus of the learning experience will be the application of knowledge and skills learned through coursework to include observation, written and verbal communication, professional behavior, individual and group participation with patients and clients, and beginning level assessment and intervention. At the completion of Level I Fieldwork experiences the student will demonstrate beginning-level competency on a series of clinical skills.

*Prerequisite: OCC621, OCC625*

**OCC758****5 credits****Assessment and Intervention: Children & Youth**

Students explore occupational therapy assessment and intervention approaches as they apply to children and youth whose lives have been affected by complex developmental, physical, cognitive and neurological disorders. Students will conduct an in-depth analysis of the physical, social, and psychosocial contexts in which intervention strategies occur. Hands-on techniques, consultative models, reimbursement and practice domain challenges/opportunities, documentation strategies, client and caregiver education, family-centered care and theoretical constructs are explored. Adaptive equipment, assistive devices, and emerging technology are examined. Learning activities help students to develop a repertoire of strategies to observe and assess children and youth, develop collaborative team skills, design intervention plans, refine their activity analysis skills, and identify the theoretical relevance for assessment tools, assistive devices and intervention strategies.

*Prerequisites: OCC613, OCC621, OCC623*

**OCC757****3 credits****Innovative Practice in Occupational Therapy**

This course offers an in-depth exploration of emerging areas for occupational therapy practice. Issues regarding program development, financial and human resource management, outcomes measurement, advocacy, and health policy will be addressed. Students will work in small groups to examine the interrelationships of person, environment and occupation within communities and populations. They will collaborate with stakeholders including local agency staff and consumers to identify and develop potential client-centered and evidence-based programs and funding mechanisms. Self-directed classroom and distance learning activities will enable students to explore strategies for improving access to occupational therapy services and expanding the realm of practice.

*Prerequisites: OCC 738, OCC 741, OCC 748*

**OCC758****5 credits****Assessment and Intervention: Children & Youth**

Students explore occupational therapy assessment and intervention approaches as they apply to children and youth whose lives have been affected by complex developmental, physical, cognitive and neurological disorders. Students will conduct an in-depth analysis of the physical, social, and psychosocial contexts in which intervention strategies occur. Hands-on techniques, consultative models, reimbursement and practice domain challenges/opportunities, documentation strategies, client and caregiver education, family-centered care and theoretical constructs are explored. Adaptive equipment, assistive devices, and emerging technology are examined. Learning activities help students to develop a

repertoire of strategies to observe and assess children and youth, develop collaborative team skills, design intervention plans, refine their activity analysis skills, and identify the theoretical relevance for assessment tools, assistive devices and intervention strategies.

*Prerequisites: OCC613, OCC621, OCC623*

**OCC765** **1 credit**  
**Level I Fieldwork D**

The overall purpose of the fieldwork experience is to provide students with exposure to clinical practice through observation and active participation in the evaluation and treatment process. The opportunity to work with clients and therapists helps students to examine their reactions to clients; themselves and other personnel while integrating academic learning with clinical practice. The focus of the learning experience will be the application of knowledge and skills learned through coursework to include observation, written and verbal communication, professional behavior, individual and group participation with patients and clients, and beginning level assessment and intervention. At the completion of all Level I Fieldwork experiences, the student will demonstrate beginning-level competency on a series of clinical skills.

*Prerequisites: OCC621, OCC625*

**OCC766** **2 credits**  
**Older Adults: Enabling Participation**

This course provides an in-depth analysis of the impact of aging on health, well-being, and participation in older adults. Topics include the impact of normal aging, changing health status, role transition, memory and life review, retirement/leisure pursuits, wellness, and end of life issues. Hands-on techniques, consultative models, reimbursement and practice domain challenges/ opportunities, documentation strategies, patient/client and caregiver education, and theoretical constructs are explored. Students will employ clinical reasoning in assessment and interventions across practice settings including acute, rehabilitation, outpatient, mental health, home, and long term care facilities.

*Prerequisites: OCC613, OCC623*

**OCC768** **3 credits**  
**Specialty Practice: Upper Extremity Rehabilitation**

Students learn the clinical reasoning process that guides occupational therapy upper extremity rehabilitation with a focus on assessment, goal setting, treatment planning and documentation strategies. The practical, philosophical and theoretical bases for intervention are reviewed for the following advanced practice techniques: physical agent modalities (PAMs), kinesiotaping, joint mobilization, static and dynamic splinting, post-surgical techniques, and upper quadrant interventions. The need for advanced certification as well as parameters for referral to and/or collaboration with other disciplines will be explored.

*Prerequisites: OCC 645, OCC 738*

**OCC770** **2 credits**  
**Practice Platform Seminar**

This course supports students in their final culminating project of the academic program, presentation of the Master's Portfolio. During this capstone course, students describe the development of their own critical thinking, assess current practice knowledge and skills, and identify constructs for their future professional practice. Through classroom and on-line learning activities that involve self-reflection on collected experiences over the program, students are guided in their professional socialization.

*Prerequisites: OCC626-OCC 738, OCC 748*

**OCC771** **3 credits**

**Level II Fieldwork A**

(Credit/No Credit)

The fieldwork component of the curriculum provides students with an in-depth experience in the practice and application of the occupational therapy process. Students will apply the knowledge, skills and clinical reasoning gained through classroom, experiential and self-directed learning experiences to achieve entry-level practice competence. Students complete two full time, 12-week fieldwork placements following successful completion of assessment and intervention coursework. Successful completion of the fieldwork education component is a requirement for graduation from the Occupational Therapy Program.

*Prerequisites: Complete a minimum of 52 OCC credits*

**OCC775 (Formerly OCC773)** **1.5 credits**

**Clinical Reasoning I**

Integrated with the Level II Fieldwork experience, this course provides the foundation for the analysis of constructs that inform daily practice decisions. Students are challenged to transfer their fieldwork experiences, academic knowledge, and clinical skills to the dynamic and challenging practice environment through the process of clinical reasoning. Clinical reasoning concepts in relation to the therapeutic use of self and occupations will be defined and discussed through client stories and opportunities to observe and question expert practitioners. Students will use the literature to validate practice decisions and/or reframe client problems and therapy interventions. Emphasis will be placed on establishing routine clinical reasoning skills through the “electronic classroom”, fieldwork experience, and on-line group discussions.

*Corequisite: OCC771*

**OCC781** **3 credits**

**Level II Fieldwork B**

(Credit/No Credit)

The fieldwork component of the curriculum provides students with an in-depth experience in the practice and application of the occupational therapy process. Students will apply the knowledge, skills and clinical reasoning gained through classroom, experiential and self-directed learning experiences to achieve entry-level practice competence. Students complete two full time, 12-week fieldwork placements following successful completion of assessment and intervention coursework. Successful completion of the fieldwork education component is a requirement for graduation from the Occupational Therapy Program.

*Prerequisites: Complete a minimum of 52 OCC credits*

**OCC784** **1 credit**

**Mastery**

This course requires the integration of previously acquired knowledge and clinical skills. Students will review the clinical reasoning process that guides the occupational therapy evaluation, goal setting, treatment planning and documentation, and discuss the philosophical and theoretical bases for intervention across the practice continuum. Through case discussion and self-testing, students will become familiar with the domains tested on the certification exam, assess readiness, and develop a plan of study.

*Prerequisites: OCC 738, OCC 748, OCC 758, OCC 766*

**OCC785 (Formerly OCC773) 1.5 credits**  
**Clinical Reasoning II**

*This course is conducted completely on-line using distance teaching methods. Content includes the analysis of critical thinking constructs that inform daily practice decisions. Students will continue to develop and utilize clinical reasoning concepts to reflect on practice decisions implemented during Level II Fieldwork. Students will use literature and evidence-based studies to validate and/or reframe client problems and therapy intervention. Emphasis will be placed on articulating the clinical reasoning process with other healthcare professionals in designated work environments.*

*Corequisite: OCC781*

**OCC797 1-3 credits**

Special Topics

*Prerequisites: OCC611 or permission of instructor*

**PASF507 (A-2 crds) (B-3crds) GR 5 credits**  
**Advanced Anatomy**

This lecture and laboratory course will review basic histology along with the major anatomical structures of the human using a regional organization. Laboratory sessions utilizing microscopic examination, models and cadaver specimen dissection will augment lecture material.

**PASF513 GR 3 credits**  
**Medical Physiology and Pathophysiology**

This lecture course is designed to teach the principles of human medical physiology along with the physiological mechanisms of common disease states.

**PASF511 GR 3 credits**  
**Applied Behavioral Science**

The topics of developmental psychology, abnormal psychology, human sexuality, stress responses, behaviors related to psychological health and illness and the diagnosis and management of common psychological disorders are the focus of this lecture course.

**PASF 517 GR 5 credits**  
**Medical History and Physical Diagnosis**

This lecture and practical laboratory course will introduce the physician assistant student to the techniques for eliciting a medical history and performing a complete physical examination on humans. The interpretation of history and physical examination findings as applicable to physiological and disease states will also be discussed. Laboratory sessions, hospital experiences and writing assignments will enhance the learning experience.

**PASF510 GR 2 credits**  
**Medical and Professional Ethics**

Understanding the philosophical principles related to biomedical ethics, patient-practitioner relationships, health policy and the role of the physician assistant provider within the health care system are the main topics encompassed in this lecture and discussion seminar course.

**PASF521 GR 2 credits**



## **Medical Genetics, Immunology and Microbiology**

This lecture course presents current concepts and issues in medical genetics, immunology and microbiology. It focuses on diseases of genetic origin, the function of the immune system and emerging trends in disorders caused by microorganisms.

**PAS611** **8 credits**

### **Clinical Medicine**

This lecture course uses an organ-system organization to present an overview of the pathophysiology, clinical manifestations, diagnostic evaluation and management of common diseases encountered in primary care. The course includes modules in: epidemiology, infectious disease, cardiology, pulmonology, gastroenterology, hematology/oncology, endocrinology, nephrology, urology, rheumatology, neurology, dermatology, ophthalmology, otorhinolaryngology (ENT) and psychiatry. Principles of health promotion and disease prevention are also presented.

*Prerequisites: PASF507GR, PASF513 GR, PASF517.*

*Corequisite: PAS612*

**PAS612** **2 credits**

### **Clinical Reasoning**

This seminar course uses clinical case studies and role-playing to guide students in developing directed history and physical examination, clinical reasoning, case presentation and patient counseling skills. Research methods and reviewing the medical literature are also presented.

*Prerequisites: PASF507GR, PASF513 GR, PASF517*

*Corequisite: PAS611*

**PAS613** **4 credits**

### **Pharmacology and Pharmacotherapeutics**

This lecture and case study seminar course is designed to introduce students to the principles of pharmacology, including the absorption, bioavailability, distribution, metabolism, excretion, classification and mechanism of action of commonly prescribed medications. Additionally, this course will give students an understanding of how drugs are used in clinical practice, including the clinical indications, contraindications, dosing, side effects and monitoring of commonly used medications.

*Prerequisites: PASF507 GR, PASF513 GR, PASF521 GR*

**PAS614** **3 credits**

### **Emergency Medicine**

This lecture and laboratory course encompasses emergent presentations and management of common primary care and emergency-care problems. Laboratory sessions cover procedures necessary for the delivery of emergency medical care. This course also includes limited emergency room patient exposure with written assignments.

*Prerequisites: PASF507GR, PASF513 GR, PASF517*

**PAS615** **2 credits**

### **Laboratory Medicine**

In this lecture and laboratory course, the utilization and interpretation of commonly used diagnostic and clinical laboratory studies such as X-rays, electrocardiograms and blood studies are reviewed.

*Prerequisites: PASF507 GR, PASF513 GR, PASF521 GR*

**PAS621** **6 credits**

### **Clinical Disciplines Overview**

During this lecture and workshop course, the physician-assistant student is introduced to the basic principles of diagnosis and treatment in the medical disciplines of pediatrics, surgery, obstetrics and gynecology. The female and male reproductive system examination workshop is also a component of this course.

*Prerequisites: PASF507GR, PASF513 GR, PASF517, PASF521 GR, PAS613, PAS615*

**PAS622** **1 credit**  
**Pharmacotherapeutics Seminar**

This course will use small-group, case-study, problem-based seminars to demonstrate the practical utilization of medications in the clinical setting. Prescription writing, dosing, titration and ongoing monitoring will be the focus of the course.

*Prerequisite: PAS613*

**PAS623** **1 credit**  
**Advanced Radiology/ECG Seminar**

(Credit/No Credit)

This seminar course builds upon the foundation of knowledge in chest X-ray, abdominal X-ray, bone X-ray and ECG interpretation developed in the PAS614 and PAS615 courses. CAT scans of the head are also reviewed. Students will recognize common disease patterns as seen on these studies.

*Prerequisites: PAS614, PAS615*

**PAS624** **3 credits**  
**Biomedical Literature and Research**

Basic statistics, research methods, epidemiology, the structure of writing used in medical research and the principles of evidence-based medicine are reviewed in this course. Students will have the opportunity to review current medical research and evaluate it with regard to its application to medical practice.

*Prerequisites: PAS612*

**Clinical Rotations** **36 credits**  
**6 Rotations (6 credits/rotation)**

The physician assistant student will complete six (5- to 6-week) rotations.

*Prerequisites: Students must successfully complete ALL didactic or classroom courses in the physician assistant program (except PAS771) and be in good academic standing prior to proceeding to any Clinical Rotations or Preceptorships*

**PAS741** **6 credits**  
**Internal Medicine Clinical Rotation**

**PAS742** **6 credits**  
**Pediatrics Clinical Rotation**

**PAS743** **6 credits**  
**Women's Health Clinical Rotation**

**PAS744** **6 credits**  
**Psychiatry/Mental Health Clinical Rotation**

**PAS745** **6 credits**  
**Surgery Clinical Rotation**

**PAS746** **6 credits**

## **Emergency Medicine Clinical Rotation**

**Preceptorships** **24 credits**

### **Preceptorships (6 credits/preceptorship)**

Two five- to six-week preceptorships must be done in an ambulatory primary-care setting. The remaining preceptorship experiences include the Primary Care Selective, in which students do five additional weeks in a medically related specialty such as family, internal or geriatric medicine, and the clinical elective. During the elective students can spend more time in one of their rotation specialties, or gain experience in other settings such as neonatology, HIV, correctional medicine, urology, orthopedic surgery, cardiothoracic surgery and others.

**PAS759** **6 credits**

#### **Preceptorship IA: Primary Care 1**

**PAS760** **6 credits**

#### **Preceptorship IB: Primary Care 2**

**PAS763** **6 credits**

#### **Preceptorship IIA: Floating Medicine Block**

**PAS764** **6 credits**

#### **Preceptorship IIB: Elective**

**PAS771** **3 credits**

#### **PA Master's Comprehensive Experience**

### **Competency Evaluation (Credit/No Credit)**

This course, which takes place throughout the entire clinical year, is the capstone experience of the PA program. It consists of two components: an independent project that includes either an applied-research project, extensive literature research with the preparation of a review article for submission to a professional journal, a PA education/instruction experience, or a community health-education project. It will be developed with, and supervised by, a faculty advisor and include an extensive literature review, integration of knowledge acquired throughout the curriculum, a written assignment and an oral presentation. The course also includes a multi-faceted summative evaluation/assessment procedure consisting of: a comprehensive written examination that encompasses topics drawn from the entire PA Program curriculum; and a series of Objective Structured Clinical Examinations (OSCE) using standardized patients where students must demonstrate: eliciting a medical history, performing a physical examination, ordering appropriate ancillary studies, formulating a diagnosis, developing a management plan, rendering patient education and documenting the findings, all as appropriate to the clinical cases presented. Students must successfully pass the independent project and the multi-faceted evaluation procedure in order to complete the requirements for this course and the master's degree.

Prerequisite: All PA professional phase didactic courses

**SDN 601** **3 credits**

### **Sustainable Design Methodologies**

Sustainability is a cultural phenomenon that is reshaping the way architects, engineers, designers and planners conceive of the built environment. This lecture/seminar course will explore changes in culture over the years that have led to the formation and adoption of contemporary sustainable design practices, technologies and processes. Current aspects of sustainability will be explored including the impact of the LEED rating system, legislation, environmental law, corporate culture evolution, integrated

design process, energy modeling and economic impacts of land development. Students will complete a final paper on future directions in sustainable design at the end of the course.

**SDN 602** **3 credits**  
**Adaptive Design**

An introduction to quantitative criteria that define adaptive responses as instrumental characteristics of design based on human comfort, program, climate and site. Investigations will seek an understanding of the reciprocity between competing (and often contradictory) design forces, such as theoretical versus real, dynamic versus static, spatial and numerical, energy gain and loss. An awareness of the function of scientific instruments for measurements and performance assessments on buildings and outdoor spaces on real sites with the goal of achieving human comfort will be explored. Students will propose design interventions in accordance with their experimental data and use simulation tools to assess ultimate performance of the intervention.

**SDN 603** **3 credits**  
**Sustainable Systems**

This course will provide a thorough understanding sustainable building systems in order to optimize energy efficiency and minimize environmental pollution while maintaining human comfort resulting in a holistically designed building that is non-polluting and energy efficient. Students will complete a series of case studies and a final project

**SDN 604** **3 credits**  
**Green Materials**

A key requirement to completing a successful sustainable design project is a careful consideration of the environmental and energy performance impacts of construction materials. Students will begin the course by learning how to complete a life cycle analysis for materials.

**SDN 606** **3 credits**  
**Development of Sustainable Buildings**

This lecture course will educate students on all aspects of sustainable development ranging from construction startup to project financing to management of green construction. Students will learn techniques of cost benefit analysis including such aspects as impact of zoning and code ordinance for green projects to understanding tax incentives for such projects. Students will complete case studies and finish the semester with a completed proposal for a sustainable project.

**SDN 611** **6 credits**  
**Sustainable Design Studio I**

This studio will emphasize interdisciplinary learning as a fundamental core concept of sustainable design. Students will be challenged to work collaboratively on a series of design projects that foster creativity, ingenuity and innovation as key components of effective sustainable design.

*Prerequisites: SDN 601*

**SDN 615** **3 credits**  
**The Sustainable Organization Primer**

This lecture/seminar course will provide a thorough understanding of the different components necessary to build and maintain a 21st century sustainable organizations. This course will explore the role of diversity, impact of environment, green supply chain management, and branding/rebranding strategies as core components of companies seeking to reach the triple bottom line: Environment, Equity and Enterprise.

*Prerequisites: SDN601*

**SDN 702** **3 credits**  
**Energy and Carbon Modeling**

Intelligent sustainable design considers the impact of buildings and business processes on global energy fuel types, consumption and carbon flows. The purpose of this course is to understand building energy modeling and enterprise carbon reporting. Students will create a schematic-level energy model and generate a carbon report using commercially available software and industry standard protocols. Student teams will explain, calculate and analyze design exercises, individual and group case studies and a final design project.

*Prerequisite: SDN 603*

**SDN 703** **3 credits**  
**Building Simulation II**

This advanced elective course will build upon the first Building Simulation course to explore more complex and technically demanding simulation software packages including DOE2. Students will complete a series of short exercises designed to develop specific modeling skills. The students will go on to develop sophisticated energy and daylight models for a proposed building and generate a comprehensive report on the results of the simulations. This course is geared towards engineers.

*Prerequisite: SDN 702*

**SDN 704** **3 credits**  
**Tensile Structures**

As architects continue to seek innovative ways to create outdoor microclimates and indoor modification of light and air, tensile structures provide a unique and effective opportunity to achieve these goals. This course will begin by introducing students to the history of tensile structures and move on to contemporary applications of this technology. Students will go on to design and build small scale tensile structures to solve specific micro-climate responses. These constructions may be used in conjunction with the Green Design Build course.

**SDN 710** **3 credits**  
**Green Design Build**

This elective course focuses on actual design and implementation of sustainable materials and technologies on a small scale construction project. Students may plug into a real project under construction or design and create their own structures for a particular site or client. Experts from around the region will be brought in as guests to assist with the process.

*Prerequisite: SDN 601*

**SDN 791** **0-3 credits**  
**Sustainability Internship**

This course allows students to pursue direct experience in a company or organization that is actively engaged in sustainability work. Students augment and enrich their overall education at the University by learning lessons of sustainability through direct work experience on sustainable projects. Permission required, see program director or Career Services office for details.

*Prerequisite: SDN-601*

**SDN 791** **3 credits**  
**Practicum in Sustainable Design, Engineering or Construction**

Students are required to complete a minimum of 8 weeks of real world experience on a project as overseen by an approved mentor on the project. In addition, students must prepare two research papers on the impact of sustainable design upon mainstream design and construction practices. Lastly, students will complete a portfolio that details their experiences and quantify the knowledge, skills and design synthesis experience gained in the practicum.

**SDN 900** **3 credits**  
**Thesis in Sustainable Design I**

This seminar is the first of a two-term sequence of courses focused on independent research, inquiry design exploration and synthesis. Weekly seminars, interactions with faculty members help to inform student research and lead to the development of a comprehensive thesis project. This course will include class based guidance on the conceptualization, analysis and execution of an individually based thesis defined by methods of inquiry necessary to the interdisciplinary nature of sustainability. Emphasis will be placed on the reciprocal relationship between the research and design processes. Advanced building simulation tools and other quantitative measurements will be integral part of those processes.

*Prerequisites: SDN 611*

**SDN 901** **6 credits**  
**Thesis in Sustainable Design II**

This studio course is the second in a two-term sequence and will focus on the continuation and completion of the project begun in the previous semester. Students will be required to focus on specific details and features of their project. If agreed to by the program director, students will present their final project in a public forum and generate a final “book” (using the most current Philadelphia University Guide For The Preparation Of Doctoral Dissertation And Master’s Theses document) that includes all of the work completed during the studio sequence. For a building design project, students will be required to present their building simulation results as part of the final requirements for graduation.

*Prerequisites: SDN 900*

**SDNF 500** **3 credits**

This course provides a common foundation in the design of the built environment for on-design students. Topics include the creation of new designs for the built environment, applying graphic communication skills to create design documents, and synthesizing basic construction techniques into design projects. Students will complete multiple design projects which increase in complexity and independence.

**SDNF 501** **3 credits**

This course provides a common foundation for students without experience in the built environment. Topics include vocabulary, understanding and reading architectural and landscape drawings, how to create architectural drawings, experience in the design process, construction assemblies and the presentation of project material.

**TAX660** **3 credits**  
**Individual Taxation**

This course is a study of federal tax law as it pertains to individuals. It emphasizes the determination of gross income, deductions and credits, tax accounting and timing principles, realization and recognition of gains and losses, and standards of tax practice and ethical concerns. Students gain an awareness of history and tax policy considerations behind various Internal Revenue Code provisions.

**TAX662** **3 credits**  
**Corporation Taxation**

This course will provide students with knowledge concerning organization, capital structure, gross income and deductions, dividends, accumulated earnings tax, personal holding tax and stock redemptions.

**TAX664** **3 credits**  
**Tax Research**

This course enhances the student's ability to identify tax issues, locate and evaluate the legal authority relevant to those issues and effectively communicate, both orally and in written form, the conclusions and recommendations from their research. Electronic (computer) research will be taught in a hands-on setting. Students will gain an awareness of issues in federal tax practice and procedure, including ethical concerns for tax professionals.

*Prerequisites: TAX660, TAX662*

**TAX763** **3 credits**  
**Financial Planning**

This course will cover all aspects of financial planning including income tax planning, estate tax planning and strategies, gift tax, insurance planning, investment strategies, planning for the elderly and planning for survivors.

**TAX765** **3 credits**  
**Taxation of Flow-Through Entities**

This course provides an in-depth study of flow-through entities including S corporations, partnerships and limited liability companies. Emphasis will be focused on student's understanding of the tax statutes, court cases and practice techniques related to the concept of "choice of entity." This course creates an awareness of the potential consequences of choosing a particular form of entity. Topics covered include formation, operation, and dissolution of S corporations, partnerships and limited liability companies.

**TAX770** **3 credits**  
**Business Tax Planning**

This course explains the various types of entities, types of compensation, fringe benefits and liquidation of each type of entity such as proprietorships, partnerships, corporations and 1120S corporations.

**TAX771** **3 credits**  
**Advanced Individual Taxation**

This course is a continuation of TAX660 - Individual Taxation and is intended as a comprehensive continuation of advanced topics for individuals. In addition to federal taxes, Pennsylvania, New Jersey and Delaware state tax regulations will be covered.

*Prerequisite: TAX660*

**TAX778** **3 credits**  
**Current Issues in Taxation and Accounting**

This course will update students in various tax and accounting topics. Topics will include new development at the IRS and in areas such as individual taxation, business taxation, financial planning, business tax planning, multi-state tax issues, estate taxation and accounting and auditing pronouncements.

**TAX782** **3 credits**

## **Tax Accounting**

This course will review accounting methods and periods, installment method, long-term contracts and changes in accounting methods.

**TAX789** **3 credits**

### **Taxation of Real Estate Transactions**

This course emphasizes the income tax aspects of acquiring, operating and disposing of investment and personal real estate. Detailed consideration of deductions, conventional and creative financing techniques, foreclosures and repossessions, subdivision, sales/leaseback transactions, tax-deferred exchanges, involuntary conversions, and sale of principal residence.

**TAX791** **3 credits**

### **Internship**

Internships provide students with an opportunity to apply and further develop the knowledge they have gained in the classroom. Under faculty supervision, students work in salaried positions related to their career goals. While on their assignments, students develop meaningful learning objectives, attend an internship seminar, complete challenging assignments, and write bi-weekly reports analyzing articles in academic journals and practitioner publications.

*Prerequisites: Minimum of 18 graduate credits completed (excluding foundation courses); available to full-time students only and subject to availability and eligibility; permission required, see Program Director or Career Services Office for more information.*

**TAX793** **3 credits**

### **State and Local Taxation —Individual and Corporations**

Emphasis will be placed on individual and corporate tax problem areas in the states of Pennsylvania, New Jersey and Delaware. Gross receipts and sales tax will also be covered.

**TAX794** **3 credits**

### **IRS Tax Procedures**

A complete review of audit, collection and appeal procedures conducted by the Internal Revenue Service will be examined by the students.

**TAX795** **3 credits**

### **Estate and Gift Taxation**

This course will review mainly the estate and gift tax returns, such as preparation and problem areas. Deductions, income, annuities and taxable transfers will be discussed.

**TAX797** **1-3 credits**

### **Selected Topics**

Content will vary in response to current issues.

**TAX798** **3 credits**

### **Independent Study**

This course provides students with an opportunity to pursue areas of interest while working jointly with a faculty member. Subject to availability and approval required, see appropriate form online on the University Registrar's web page <http://www.philau.edu/registrar/> for more information.

**TES901** **3 credits**

### **Preliminary Examination Preparation**



This course is intended for Ph.D. students who have completed their coursework, but who have not yet passed both parts of the qualifying examination. Students will meet with their advisor on an independent basis and will be given guidance and practice examinations to prepare for the doctoral-qualifying examination.

**TES902** **6 credits**  
**Thesis I**

Doctoral students will form the doctoral committee and complete formulation of the thesis topic. Literature review and research of the proposed topic. Oral presentation and written submission of thesis proposal will be made to the student's doctoral committee.

**TES903** **9 credits**  
**Dissertation Research I**

This course is intended only for those students who have achieved Ph.D.-candidacy status. Seminal and original research will be conducted with a goal of preparing and defending a doctoral dissertation.  
*Prerequisite: Admission to doctoral candidacy*

**TES904** **3 credits**  
**Dissertation Research II**

This course is intended only for those students who have achieved Ph.D.-candidacy status. Seminal and original research will be conducted with a goal of preparing and defending a doctoral dissertation.  
*Prerequisite: TES903*

**TES906** **6 credits**  
**Thesis II**

Completion and oral presentation of thesis work to the graduate faculty of Philadelphia University. Submission of the written thesis using the most current Philadelphia University Guide For The Preparation Of Doctoral Dissertation And Master's Theses document.  
*Prerequisites: TES904*

**TXD615** **3 credits**  
**Design Studio IA**

Focuses on design research as an essential beginning for textile design studio work. Students in all concentrations will work on common projects and, toward the end of the semester, take their research work into design work specific to their concentration.

**TXD616/TXD617** **6 credits**  
**Design Studio IB & IC**

This initial course will be delivered through lecture/studio sessions and will ensure that the student gains increasingly advanced knowledge of the technical/design aspects of knit, print or weave design. Within TXD616 and TXD617, projects will be devised to integrate the knowledge and practice gained through design and technical courses, with the development of individual creative design work in the chosen concentration (knit, weave or print).

**TXD625** **0 credits**  
**Seminar**

(Credit/No Credit)

Weekly seminars will be arranged during the first semester, to which visiting speakers will be invited to give presentations on topics covering the national and international perspectives of marketing,

technology and design in textile and related activities. Student participation will be expected during these seminars.

**TXD665** **3 credits**  
**Design Management**

The aim of this course is to create an awareness of the factors involved in the process of innovation and design, and the importance of establishing a policy and strategy, which will ensure that the design process is effectively promoted and managed to assist in the achievement of organizational goals. At the end of the course, students will be able to: (a) relate the process of design to corporate and product strategy; (b) describe the nature of the tasks undertaken by industrial innovators and designers; (c) prepare a brief for a design project; and (d) monitor and evaluate the progress of a design project. They will also become aware of (a) the contribution made to the design process by systematic techniques such as value analysis and by specialist support staff; (b) the factors affecting creativity and innovation; (c) the link between product and manufacturing system design; and (d) the legal protections offered to designers.

**TXD742/TXD743/TXD744** **9 credits**  
**Design Studio II**

Studio work involving advanced-level technical/creative projects in the chosen design concentration (as in Design Studio I), and the opportunity for interdisciplinary work encouraging knit/print, weave/print or weave/knit coordination, will be carried out in the first part of the semester. Student design work at this point should progress from assigned projects to independent, student-directed work. Toward the end of the semester, reviews of student work will lead to the selection of a "major project." The aims and outcomes of this project will be written up in detail for submission to a faculty review committee. This project will form the basis of the final semester's design work, thesis report and student exhibit for graduation.

**TXD749** **3 credits**  
**Weave Technology II**

The variations, functions, auxiliary devices and design characteristics of dobby and Jacquard looms and the equipment used to support the weaving process will be studied. Calculations relating to production and materials will be considered, along with the accurate analysis of fabrics for weight and cover. Consideration will be given to size, texture, fiber type, weave and other fabric parameters. Advanced multilayered weaves will also be studied.

**TXD750** **3 credits**  
**Knitting Technology**

A further investigation into the construction, design and production of both weft- and warp-knitted fabrics. Lectures will be complemented with lab work involving the design, production and analysis of knit fabric upon power-knitting equipment.

**TXD756** **3 credits**  
**Advanced Jacquard**

The design and production of Jacquard fabrics will be studied. Students analyze designs and produce complex fabrics on commercial equipment using computerized design and production systems.

**TXD772/TXD773/TXD774** **8 credits**  
**Design Studio - III**

(a) Project

The major project worked on independently by students during this final semester will be chosen to show the student's range of creative and technical ability. It will be concerned with a specialized area within their design concentration. Each project will be required to encompass:

- (1) Design ideas and extensive sketchbook development
- (2) Market research and technical notebooks
- (3) Print Croquis and/or fabrics in sample form, product rendered designs

(b) Final Exhibit

The student will be expected to mount a personal design exhibit showing the range of his/her abilities in either knit, weave or print design. The work will be professionally presented and displayed for judging by a panel of design faculty. An important outcome of this exhibit will be the opportunity for key industrial people to visit, and for possible career opportunities to result. A secondary outcome will be its inspirational impact on undergraduate design students within the University.

**TXD776** **3 credits**

**Textile Printing Technology**

A specialized and practical course in the principles, techniques and chemical processes involved in the printing of textiles. The chemistry and use of different dye classes and pigment systems; application printing; discharge, burnout and other styles; and the influence of thickeners, cloth preparation and fixation processes on quality and colorfastness are examined.

**TXD777** **3 credits**

**Advanced Computer-Aided Textile Design**

This course focuses on both the conceptual and technical aspects of digital portfolio presentation for the textile designer. Students will use interactive media to create both a CD-ROM portfolio and a personal website. Course projects provide an in-depth exploration of Adobe Photoshop, Adobe Illustrator and multimedia design software. Students must have a clear understanding of Adobe Photoshop and Adobe Illustrator before enrolling in this course.

**TXD780** **3 credits**

**Advanced Drawing: Materials & Techniques**

This course is designed to further develop the design student's drawing abilities and creative thought process, while encouraging conceptual development and a deeper understanding of contemporary issues in art and design. This course will provide an in-depth exploration of line, color and materials using a variety of drawing tools while introducing a more conceptual approach to drawing. Students will participate in off-campus trips to galleries and museums.

*Prerequisite: DRAW-101 or VSDRW-101 (or equivalent) or permission from instructor*

**TXD798** **3 credits**

**Independent Study**

Students may select an independent project or research topic. Approval is required, see appropriate form online on the University Registrar's web page <http://www.philau.edu/registrar/> for more information.

**TXD975** **1 credit**

**Thesis**

(Credit/no credit)

The design work encompassed through the major project needs to be submitted in thesis form, three copies of which are to remain at the University. The thesis should contain written material relative to

the design inspiration, technical development and production process, and yet students are encouraged to include visual imagery relevant to their work and design development as evidence of their design capabilities. This course will assist final-semester students working toward the production of their thesis document using the most current Philadelphia University Guide For The Preparation Of Doctoral Dissertation And Master's Theses document. In addition to the bound thesis, other media presentations of their final project will be explored.

*Prerequisite: TXD744*

**TXD993** **3 credits**  
**European Textile Print Study Tour**

A two-week study tour in the textile printing areas of France, Switzerland and Northern Italy introduces textile majors to the expertise of important European printers, screen engravers and studios in the areas of printed textile design, style, color and printing technology. Visits to the two important French historic textile museums and other related textile plants are also included.

*Prerequisite: Approval of the program director*

**TXD994** **3 credits**  
**European Knitting Study Tour**

A guided visit to the textile machinery producers and textile industry in Europe (Germany and Switzerland). During the 10 to 14-day stay, students will have the opportunity to see some of the leading knitting machine manufacturers, tour the production plants, attend demonstrations, use design equipment and participate in presentations regarding the projected targets of this industry.

*Prerequisites: TXF502, TXE712 and TXE752 or equivalents*

**TXE601** **3 credits**  
**Fiber and Yarn Studies**

This course advances the knowledge of fibers and yarns. In the case of cotton and wool, a detailed study of how fibers are produced is made and how the properties and structure of fibers vary in relation to variability in growing conditions is explored. For man-made fibers, the length and fineness can be changed during manufacture depending on the type of system on which the yarn is to be produced. Yarn-processing systems are covered in detail along with faults that can result from various causes, in either the fiber or the machines. Quality-control procedures are emphasized at each stage of processing, along with methods for analyzing test results. Typical products are discussed from the point of view of type of fiber used and type of yarn structure.

**TXE613** **3 credits**  
**Characterization of Fibrous Materials**

Topics will include chemical nature and structure; mechanical, electrical, and thermal properties; viscoelastic properties, use of instrumentation with computer-controlled data acquisition; IR, RAMAN, and molecular spectroscopies; SEM; and creep/stress relaxation. The physical and mechanical testing of fibers, yarns and fabrics are studied, along with the static and dynamic-load response of textiles.

**TXE621** **3 credits**  
**Mechanics of Materials**

Definitions of stress and strain, uniform states of stress and strain, transformations, principal axes, stress/stress relations, strain/displacement relations. Equilibrium, boundary conditions, simplifying assumption, and yield criteria are presented.

**TXE622** **3 credits**  
**Mechanics of Textiles**

Hierarchical mechanical-dependency relationships in textiles are discussed. Included are the role of fiber and yarn twist, yarn crimp, finishes, and coatings to mechanical response of textiles. Dynamic and static response to various types of loading are investigated. Tearing, abrasion, and wear properties as a function of textile form are presented.

**TXE624** **3 credits**  
**Advanced Textile Composites**

The objectives of this course will be to expose the student to the textile materials and processes used in composite applications and to introduce methods of analyzing and predicting the behavior of the resultant products. Fiber architecture of textiles used for composites is reviewed along with manufacturing processes. Tools for predicting elastic properties will be introduced along with the relationship of elastic properties and geometric considerations.

**TXE625** **3 credits**  
**Biomaterials Technology**

General introduction to the uses of artificial materials in the human body for the purposes of healing, correcting deformities and restoring lost function are presented. Topics include biocompatibility, techniques to minimize corrosion, and specific uses of materials in various tissues and organs.

**TXE713** **3 credits**  
**Coloration and Finishing Studies**

Applications studied in detail will include methods of imparting dimensional stability to cotton fabrics through cross-linking; the problems associated with dyeing fiber blends; textile printing using pigments and various dyes. A study will also be made of binders, e.g., latex use in pigment printing and dyeing. Other methods of textile coloration, e.g., solution dyeing, garment dyeing and transfer printing will be considered. Instrumental color measurement will also be covered.

**TXE721** **3 credits**  
**Analytical Methods**

Statistical process-control theories and methods are discussed, and applications toward optimizing both process and product quality in modern textile operations are considered. The objective of these studies is to develop a process/product control system for the progressive textile plant of today. Another major segment of this course will be the review and employment of various methods of analysis of experimental data. Various techniques, and their advantages and disadvantages, will be considered and studied using textile applications.

**TXE751** **3 credits**  
**Advanced Woven Structures - Product Development**

Independent pursuit of goals in the development of woven fabrics is emphasized. The student will complete three projects, with product-development skills enhancement as a primary goal. Each project will require a search of current literature, the use of CAD, selection of equipment, production of a prototype fabric and submission of a technical report. Two of the projects will be selected by the course advisor and the third will be student-selected.

**TXE752** **3 credits**  
**Advanced Knitted Structures - Product Development**

This course is an in-depth study of weft- and warp-knitting technologies, fabric constructions, and apparel, home furnishing and industrial products/applications/markets. Weft-knit fabric technologies studied include single flat and tubular, double knit, fully fashioned, electronic, etc. Warp-knit fabric

technologies studied include tricot and raschel, weft inserted, double needle bar, multiaxial, etc. Students are exposed to a variety of weft- and warp-knitting machines, stitch constructions and mechanical and electronic design/pattern mechanisms. Knit fabric geometry is analyzed on the machine, off the machine and after finishing. The relationship and interactions between the knitting yarn and knitting elements are well established. Knitting productivity and quality factors are emphasized.

**TXE753** **3 credits**  
**Advanced Nonwoven Structures - Product Development**

Nonwovens have a vast range of physical properties and end-use applications with an exceptionally high performance-to-price ratio. Such remarkable characteristics are possible due to the range of fiber type, bonding methods, and finishing methods possible at an exceptionally low cost. This course is intended to give a broad range of knowledge in nonwoven manufacturing methods cost and end-use applications and consumption. This will be accomplished by lecture, laboratory experiments, literature searches, research, cost analysis, statistical comparisons and modeling.

**TXE754** **3 credits**  
**Industrial and Specialty Fabrics - Product Development**

Industrial fabrics are used in a variety of applications other than consumer apparel and home furnishing products. For example, industrial fabrics are used in automotive trim, architectural fabric structure, awnings/outdoor furniture, aerostats, camping products, commercial/institutional interior trim and furnishings, composites, conveyor belts, filtration, geotextile and geomembrane applications, hazardous occupational products, marine products, military products, passive solar systems, sails, tarpaulins, tents, tires and window energy systems. This course is concerned with the study of major industrial-fabric applications and constructions. The performance requirements for each major industrial application will be related to the selection of specific fabric constructions. Trends in industrial fibers, yarn structures, fabric constructions, fabric finishing/coating/laminating and in fabrication of industrial products are reviewed for each major application. Each major application/market will be covered, wherein specific requirements and qualified fabric construction will be reviewed. The historical development of each application will be emphasized to demonstrate the impact of new materials/material forms/processing techniques on the dynamic nature of the industrial fabric business.

**TXE755** **3 credits**  
**Advanced Yarn Studies**

This course allows for an independent pursuit of advanced knowledge through a literature search in a selected area of research. Further, the course is structured toward an advanced study of the newer methods of yarn manufacture and the latest developments in processing, computerized control and testing methods. Relationships between yarn properties and product properties are investigated.

**TXE759** **3 credits**  
**Product Evaluation**

The processes for the evaluation of fabrics and products are examined. The use of product assessment as a tool for process and product improvement is emphasized. The complexity of the fiber, yarn, fabric and product-forming systems is such that it requires careful evaluation at each stage of the manufacturing process. A comprehensive understanding of the interrelationships of the fabric and product forming stages as related to their evaluation is developed. Established and innovative methods of evaluation are explored.

**TXE762** **3 credits**  
**Textile and Apparel Operations Management**

This course is intended to cover the usual operations management topics, but with direct emphasis on textile and apparel operations. It deals with such topics as global competitiveness, product layout, strategies of life-cycle management, capacity planning and forecasting, quality management, materials management, human resource management, facilities management, production planning, characteristics of textile equipment and managing technological change.

**TXE783** **3 credits**  
**Advanced Chemistry of Fibrous Materials**

The course is designed to introduce modern methods of instrumental analysis and related technologies to fibrous materials. This course is concerned with the study of spectroscopic methods such as: UV-Spectroscopy, FTIR, NMR, EPR, GC, HPLC, microscopy, DSC and some microbiological methods, etc., applied to material science and technology. In addition, this course will introduce students to related fields of fibrous materials and polymers such as gels and sprays, and the technology of production of delivery systems for drugs and medications. Introduction to adhesion processes and superabsorbents (e.g., diapers, incontinence products and biotextiles) will also be covered. Lectures are complemented with laboratory work and seminars.

**TXE790** **3 credits**  
**Quality Management**

Quality has emerged as a formal management function. No longer restricted to manufacturing and operations areas, it now includes the design, purchasing and marketing processes. Through lecture, discussion and experiential activities, this course examines quality theory and practice — how a more sophisticated understanding of quality can lead to a strategic approach to utility management which is necessary to compete in today's world marketplace. Factors required for creating and maintaining a corporation's strategic and competitive edge are thoroughly analyzed.

**TXE791** **3 credits**  
**Internship**

Internships provide students with an opportunity to apply and further develop the knowledge they have gained in the classroom. Under faculty supervision, students work in salaried positions related to their career goals. While on their assignments, students develop meaningful learning objectives, attend an internship seminar, complete challenging assignments and write bi-weekly reports analyzing articles in academic journals and practitioner publications.

*Prerequisites: Minimum of 18 graduate credits (excluding foundation courses); available to full-time students only and subject to availability and eligibility; permission required, see program director or Office of Career Services for details.*

**TXE797** **1-3 credits**  
**Selected Topics**

**TXE798** **3 credits**  
**Independent Study**

Students may select an independent project or research topic. Approval required, see appropriate form online on the University Registrar's web page <http://www.philau.edu/registrar/> for more information.

**TXE941** **9 credits**  
**Research Thesis**

In consultation with the thesis advisor, the student will select an area for concentrated study. The elements of the study will include, but not be limited to, literature searches, experimental design, research, thesis preparation (using the most current Philadelphia University Guide For The Preparation

Of Doctoral Dissertation And Master's Theses document) and oral thesis presentation. This project is the culmination of a rigorous preparation in one or more areas of specialization and leads to the establishment of expertise in a chosen field. (20 hours minimum per week)

**TXF501** **3 credits**

**Foundation Fiber and Yarn Studies**

This course introduces the basic knowledge of fiber and yarn technology. Included are the proper use of fiber/yarn terms and definitions, the construction parameters of the various fiber and yarn types and detailed analysis of performance properties for each. This information is then used in the proper selection of fibers and yarns for various fabrics and ultimately for various end-use textile products in apparel, household and industrial applications. This is a foundation course that does not count for credit toward the graduate degree.

**TXF-503** **3 credits**

**History of Textiles and Costumes**

A multi-faceted survey of textiles and costumes from ancient cultures to the present, technical- and visual-design aspects of the textile arts, the influence of trade on design trends, styles in period costume and the sociological implications of dress are all incorporated. This is a foundation course that does not count for credit towards the graduate degree.

**TXF-506** **3 credits**

**Design Foundations II**

Color is introduced in this foundation design course with an emphasis placed on its practical application in the design process. Projects done by students, using a variety of media, will explore the interaction of color in design with both formal, biophysical and psychological implications and goals. This is a foundation course that does not count for credit towards the graduate degree.

**TXF-507** **3 credits**

**Design Foundations III**

In-depth studies emphasizing the use of color and varied media in both 2D and 3D forms are undertaken in this foundation course. The interrelationship of the elements and principles of design are addressed through solving a variety of visual problems. Processes of abstraction are explored in projects using a wide variety of media. Students will be expected to develop their abilities for critical analysis of their own work, as well as design processes and products in general. This is a foundation course that does not count for credit towards the graduate degree.

**TXF510** **3 credits**

**Introduction to Digital Imaging**

This course focuses on increasing the student's individual level of computer literacy through the exploration of the basic structure of the operating system, general Internet skills and the fundamentals of 2D image making and web-design programs. Course projects provide hands-on experience with Adobe Photoshop, Adobe Illustrator and web design software. This is a foundation course that does not count for credit towards the graduate degree.

**TXF511** **4 credits**

**Knit Technology I**

The understanding of both weft- and warp-knit fabrics through an investigation of knit construction, machinery, principles and knit fabric analysis. Lectures are complemented with a series of lab exercises



on hand-flat equipment and fabric-analysis projects designed to fully acquaint the student with the principles of knit-fabric design and production.

**TXF512** **3 credits**

**Knit Design Studio I**

Students will learn through individual development how to create a range of texture and color effects within knit design. Independent needle selection and the use of the presser foot will be explored within design areas involving Jacquard, held-stitch and tuck-stitch structures. Design ideas will be developed through to swatch/sketch proposals suitable for sweater production.

**TXF513** **3 credits**

**Knit Design Studio II**

A knit design studio elective for Textile or Fashion majors specializing in the knit-design area. Original design ideas will be developed through swatch/sketch presentations. Garment ideas will be developed through technical sketches and specifications into completed sweaters.

**TXF514** **3 credits**

**Print Design Studio I**

Techniques, materials, tools and basic information needed for the design on paper of printed fabrics for the apparel and home furnishing fields are studied. Hands on approaches with gouache and watercolor are used to prepare colorway and repeats. Students prepare a portfolio and learn to keep a sketchbook. A brief introduction to printing methods is included.

**TXF515** **3 credits**

**Print Design II**

This course focuses on creative use of CAD in surface patterning, which integrates with hands-on design applications that students acquired in PRINT-303 Print Design I. Digital workflow, which includes scanning croquis, designing pattern on CAD, digital color matching and color ways will be introduced. At the same time, strong emphasis is placed on making croquis, which develop from drawings and paintings in the sketchbook. Students will create printed textile designs and patterns for Jacquard designs on paper with digital printers for apparel and home furnishing fields. Throughout the semester, sketchbook study will also be required to document the working process, as well as drawings and paintings.

**TXF516** **4 credits**

**Dyeing & Finishing**

This course presents an overview of the wet processing of fibers, yarns and fabrics. Included are the preparation, dyeing and finishing of textiles. Some emphasis is placed on the chemistry and technology involved in these operations. Dyes are studied by their method of application and the primary substrates to which they are applied. Chemical, thermal and mechanical processes are discussed for both preparation and finishing of fabrics.

**TXF517** **4 credits**

**Weave Technology I**

The structures and analysis of woven fabrics will be studied utilizing CAD, pick outs and laboratory assignments on industrial equipment. Weave structures will include plain, twills and satins (with their derivatives), color effects, textural effects (cords, piques, etc.) and pile weaves. Fabric will be mathematically analyzed for weight, yarn size, fabric count and yarn crimp to specify fabric structure.

Necessary loom controls (draw, chains and reed plans) will be used to relate lectures and laboratory work on dobby looms.

**TXF518**

**3 credits**

**Weave Design Studio I**

This course focuses on the effects and interactions that yarn, color, texture and structure play in woven design. Working with multi-harness floor looms and dobby looms, students create warps and chains, and weave prototype cloth for various end uses.

**TXF519**

**3 credits**

**Weave Design Studio II**

The study of elements of woven design is brought to the problems of multi-layered cloth, compound weaves, block designs and other advanced structures. Students use several CAD programs in conjunction with AVL compu-dobbies to increase their design capabilities. Multi-harness floor looms and dobby looms are also used to develop cloth from concept to actuality.



## Admissions

**Classification:** Day Division or Evening Division Student.

Students are classified as either day division or evening division for academic advisement and administrative purposes, not in consideration of the time of the day classes are attended.

For information on graduate degree programs, contact the Office of Graduate Admissions  
215.951.2943  
gradadm@PhilaU.edu, [www.PhilaU.edu/graduate](http://www.PhilaU.edu/graduate)

### DAY DIVISION PROGRAMS

**Day division students** contact Office of Admissions 215.951.2800 or 1.800.951.7287,  
admissions@PhilaU.edu

Students who apply to the University should be seeking a sound and challenging collegiate education and have demonstrated an ability to be successful in such a program by secondary school or prior college/university performance and preparation. Each student is reviewed individually and evaluated on the basis of educational background, including course preparation and grades earned.

The University reviews applications and makes admissions decisions on a rolling basis. Students must file a completed application accompanied by a nonrefundable application fee of \$40 and the appropriate academic credentials mentioned below. All applicants must complete the requirements for a high school diploma or submit the results of the GED.

Prospective high school students should submit an application early in their senior year. Applications reviewed after February 1 will be considered on a space-available basis.

To be considered for admission, freshman applicants must submit official academic credentials with 15 units of secondary school credit and must have taken the Scholastic Aptitude Test (SAT) or the American College Test (ACT). For information about SAT I and ACT writing test requirements, please contact the Office of Admissions. Required academic or college preparatory courses are four English, three Mathematics (including Algebra II and Geometry), three History and Social Science, two Laboratory Science, and three elective courses. Freshman applicants must also submit either an essay or writing sample and one recommendation letter.

Home-schooled and prospective students who have been away from high school for several years are also encouraged to apply for admission. Interested applicants should contact the Office of Admissions to discuss application requirements.

Students wishing to transfer must submit official transcripts from all colleges or universities attended as well as an essay or writing sample and one recommendation letter. If a student has earned less than 30 college credits, an official secondary school record and SAT or ACT scores

are also required. For information regarding transfer student application deadlines, please contact the Office of Admissions.

### **EVENING DIVISION PROGRAMS**

**Evening division students** contact the Office of Continuing and Professional Studies 215.951.2900 evening@PhilaU.edu

Prospective students for programs delivered through the evening division should contact the Office of Continuing and Professional Studies for application information at 215.951.2900 or via email at evening@PhilaU.edu. Degree programs are designed, in most cases, to accommodate adults whose professional obligations prevent them from enrolling full-time in regularly scheduled day classes.

The evening division's new student body is primarily composed of adults who are seeking a college education leading to a Bachelor of Science in an accelerated format. Some individuals are returning to higher education after their formal education has been significantly interrupted by a period of work, military service, homemaking, child rearing or some combination of these. Some wish to return to higher education to learn new concepts and skills, to do refresher work in a particular field, to prepare for a new career or experience intellectual or social stimulation.

Prospective students should refer to the Continuing Studies section of this catalog or contact the office directly at 215.951.2900 for more specific information.

Applications are accepted for the evening division on a rolling basis.

### **TRANSFER STUDENTS**

Philadelphia University welcomes applications from transfer students for enrollment in day or evening programs.

Transfer students (with the exception of students enrolling in the combined BS/MS Occupational Therapy program\*) may be awarded transfer credits applicable to degree requirements provided a "C-" or better is earned in the course from a properly accredited institution.

Transfer students in the day division are expected to complete a minimum of 60 credits at the University with at least 12 credits in upper-division work in their major field and six credits in College Studies. Requirements are different for transfer students in the evening division. Contact the Office of Continuing and Professional Studies to learn more.

**\*Combined BS/MS Occupational Therapy program:** Transfer students with less than 30 applicable credits can be considered for admission. Students will be awarded transfer credit for no more than half of the graduate prerequisite courses provided a "B-" or better is earned in each course from a properly accredited institution. These courses include Anatomy &

Physiology I and II, Lifespan Human Development, Abnormal Psychology, Statistics, two Sociology/ Anthropology/ Cultural Studies courses and Physics (non-calculus based). At least one of the three science courses must be completed at Philadelphia University. Transfer credit may be awarded for all other applicable degree requirements provided a "C-" or better is earned in the course from a properly accredited institution.

## **International Students**

International students who wish to enter Philadelphia University must submit the appropriate application and translated copies of their secondary school and college credentials by February 1. Applications received after February 1 will be considered on a space available basis. International students are eligible for day division admission only.

If English is not the native language of the student, TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing System) scores should be forwarded to the Office of Admissions. International students must make definite arrangements to meet all financial obligations while attending the University. Financial aid is not available to international students. However, International Merit Scholarships are awarded to academically eligible students. A statement of financial support and bank statements indicating sufficient funds must be included with the application. The I-20 immigration form will be issued following acceptance and payment of a matriculation deposit to the University.

# Financial Information

Billing questions? Contact Student Accounts Office 215.951.5988, [studentaccounts@PhilaU.edu](mailto:studentaccounts@PhilaU.edu).  
For more information, go to [www.PhilaU.edu/studentaccounts](http://www.PhilaU.edu/studentaccounts)

## ANNUAL EXPENSES FOR 2012-2013

### FULL-TIME STUDENT

(12 to 18.5 credits per semester)

#### Comprehensive Fees:

##### Undergraduate Day

Tuition (annual rate)\*

(includes Physician Assistant pre-professional phase) \$31,874

Students registering for an overload

(Credits over 18.5 per semester) \$1,063/per credit

Physician Assistant Program\*\*

(professional phase) \$36,729

#### Room\*

Residence Halls \$5,032

Townhouses \$7,082

Independence Plaza Apartments \$7,388

Falls Center Studio \$7,038

Falls Center 1 BR (1 Person) \$7,866

Falls Center 2 BR and 3 BR \$7,452

#### Board\*

19-Meal Standard Plan \$5,146

19-Meal Premium Plan \$5,316

14-Meal Standard Plan  
(upperclassmen only) \$4,892

14-Meal Premium Plan  
(upperclassmen only) \$5,020

10-Meal Standard Plan  
(non-residence halls) \$3,606

10-Meal Premium Plan  
(non-residence halls) \$3,692

5-Meal Standard Plan  
(non-residence halls) \$1,924

5-Meal Premium Plan  
(non-residence halls) \$1,945

\* Cost per semester is 1/2 the annual rate

\*\* Cost per semester is 1/3 the annual rate

Included in the above comprehensive fee is use of the Paul J. Gutman Library, The Kanbar Campus Center, The Gallagher Athletic, Recreation and Convocation Center and athletic fields; Ram Van transportation and laundry facilities; admission to all on-campus athletic events and cultural programs; and subscriptions to student publications.

#### Other Fees:

##### Full-Time Undergraduate Day

1. Application Fee \$40/student
2. Credit by Examination \$1,030/course
3. Room Security Deposit \$250/resident student

4. Room Reservation Deposit	\$150/resident student
5. START Program Fee	\$150/new student
6. Graduation Fee	\$100/student (graduates only)
7. International Student Fee	\$55/semester
8. Health Center Fee	\$45/semester
9. Parking Decal	\$70/semester
10. Lost Campus Card Replacement	\$25/card
11. Tuition Insurance – on campus	TBD
12. Tuition Insurance – off campus	TBD
13. Health Insurance	TBD

**PART-TIME STUDENT**

*(per credit hour unless otherwise indicated)*

**Undergraduate Day**

Tuition	\$1,030/credit	
Credit by Examination	\$1,030/course	
Tuition Insurance	TBD/credit	Application Fee \$40/student
Graduation Fee (graduates only)	\$100/student	

**Undergraduate Evening**

Tuition	\$555/credit
Credit by Examination	\$555/course
Tuition Insurance	TBD/credit
Application Fee	\$40/student
Graduation Fee (graduates only)	\$100/student

**Summer Session 2012**

Tuition: Day, Evening and Internship	\$555/credit
Tuition Insurance	TBD/credit

**DEPOSITS**

An applicant to the day division should send the director of Admissions a tuition deposit of \$300 after receiving a letter of acceptance. This deposit includes an orientation billing fee of \$150. The remaining \$150 will be credited to the student’s account on the first tuition billing.

All resident students are required to maintain a \$250 room security deposit on account. A deposit to a student’s Campus Card may be made for the purchase of books and supplies at the University Bookstore, as well as for use at the vending machines, photocopiers and any dining service location. A deposit of \$400 to \$500 per semester is suggested. Once deposited, funds cannot be withdrawn from the Campus Card. Unused funds are credited to the student’s account at the end of the academic year.

**TUITION PAYMENT POLICY**

Day division students are invoiced in July and December for the next semester’s charges and electronic statements may be accessed via WebAdvisor using the QuikPAY link. In QuikPAY, students may add an Authorized Payer who will also be notified when a new statement is available. **The University does not mail billing statements.**

Only accepted and completed financial aid awards, including Philadelphia University Scholarships, Federal PELL Grants, Federal Supplemental Educational Opportunity Grants (SEOG), Federal Perkins Loans, PHEAA Grants, Direct Plus Loans and/or Direct Stafford Loans are included on the student’s invoice. Late applications for financial aid, unless approved prior to the billing due date, are not credited to the student’s account or accepted as payment. Any balance due, resulting from unapproved financial aid, must be paid by the billing due date. Any



subsequent approval, resulting in a balance due the student, will be refunded to the student after the drop/add period.

Checks should be made payable to Philadelphia University, P.O. Box 95000-4210, Philadelphia, PA 19195-0001, with the student's identification number clearly indicated on the face of the check. If the University receives a total of three non-sufficient funds (NSF) checks, all future payments must be made by cash, certified check or money order. Students may also use WebAdvisor to pay their account balances online by accessing the QuikPAY link. Electronic checks and credit card payments are accepted. There is no fee to pay by electronic check. Credit card payments will be assessed a 2.75% service fee. The University accepts American Express, Discover and MasterCard for tuition payment.

Philadelphia University offers a deferred payment plan through Tuition Management Services (TMS). Enrollment forms are mailed to the student's billing address. For more information or to enroll, you may contact TMS directly at 888.356.0350 or online at [www.afford.com](http://www.afford.com). For further questions and information, contact the University's Student Accounts Office by email at [StudentAccounts@PhilaU.edu](mailto:StudentAccounts@PhilaU.edu) or by phone at 215.951.5988.

### **REFUND POLICY**

A student who wants to initiate leave of absence or withdrawal must obtain the Notification of Student Leave of Absence/Withdrawal form from the Learning and Advising Center. A student is considered in attendance until this formal notification is completed and returned to the Office of the University Registrar and the student has dropped their classes through WebAdvisor. Tuition charges for students who withdraw from the University will be refunded on the following basis:

#### **Undergraduate Day and Online Courses:**

Before classes start	100%
First week of class	80%
Second week of class	60%
Third week of class	40%
Beginning of fourth week of class	0%

#### **Undergraduate Evening Courses:**

Prior to the first class meeting	100%
Prior to second class meeting	80%
Prior to third class meeting	60%
Prior to fourth class meeting	40%
After fourth class meeting	0%

Online classes follow the undergraduate day refund policy regardless of log-in status. Summer classes follow the evening refund policy. The University uses federal regulations to determine the refund of federal financial aid funds to the federal government. A copy of this federal refund calculation is available on the Financial Aide webpage or at the University's Financial Aid Office.

Any student who withdraws or changes credit hours or room and board status after the semester begins is obligated for a full semester's room charge. Board will be charged to the official date of withdrawal, plus an additional charge of 25 percent of the unused portion.

The effective date for calculating refunds will be the effective date indicated on the Notification of Student Leave of Absence/Withdrawal form. Failure to complete this withdrawal form results

in an unofficial withdrawal. Refunds, transcripts and recommendations will be withheld by the University until this official form is received. It is also the student's responsibility to drop their classes through WebAdvisor when they complete this form.

Students dismissed from the University or from the residence halls will receive the following refunds:

Tuition based on tuition refund policy above;

Board prorated from date of dismissal, less 25 percent of the unused portion. Student is obligated for a full semester's room charge.

Insurance claims for medical withdrawals will be processed through the Dewar's tuition insurance policy. Claim forms are available in the Student Accounts office. If the student waived this coverage, no refund is available for a medical withdrawal.

### **ABSENCE AND SICKNESS**

Students who are absent from the University due to illness or injury, or any other reason, and who retain their place in class, are subject to full tuition, room and board charges during their absence.

### **TRANSCRIPTS**

Transcripts are not furnished to any student whose account is not paid in full. Transcripts may only be obtained through the Registrar's Office. Transcripts must be paid for at the time they are requested in order to be processed.

Transcript Fee	\$5/copy
Same Day Transcript Fee	\$10/copy
Overnight Transcript Fee	\$20/copy

### **FEES**

A one-time, nonrefundable application fee of \$40 must accompany the application for admission. This fee covers the cost of processing the prospective student's application and is not credited to the student's bill.

A \$100 graduation fee is charged to all December, May and August graduating seniors.

A \$45/semester Health Center fee is charged to all full-time day division students and international students, as well as part-time students electing health insurance coverage or who use the Health Center. A \$55/semester international student fee is charged to all international students.

A \$25 returned check fee is charged for any check that is returned for non-sufficient funds (NSF).

A \$70 annual parking registration fee is charged to all eligible full-time day division students. A \$15 annual parking registration fee is charged to all eligible part-time day division students.

The following fees will be deducted from the \$250 room deposit of any resident student who cancels their contract by the date indicated below:

#### **Returning Students**

Prior to May 1, \$100 of the room deposit is forfeited.

After May 1, the entire room deposit is forfeited.

#### **New Students**

Prior to May 1, the entire room deposit will be returned.

After May 1, the entire room deposit is forfeited.

## **SERVICES**

*Included in the full-time undergraduate day comprehensive fee is use of the Paul J. Gutman Library, Kanbar Campus Center, Learning and Advising Center, The Gallagher Athletic, Recreation and Convocation Center and athletic fields; Ram Van transportation and laundry facilities; admission to all on-campus athletic events and cultural programs; access to personal counseling; and subscriptions to student publications.*

*The University's Student Handbook is available at [www.PhilaU.edu/studenthandbook](http://www.PhilaU.edu/studenthandbook).*

## **Campus Card**

The University offers a Campus Card program allowing students to buy meals, make photocopies, purchase supplies and books at the University Bookstore, and use the campus-wide vending machines and dining facilities. It also serves as a University photo I.D., library card and campus activity card. Depositing funds on the Campus Card can be done in person at the cashier window in Student Accounts, by mail, by calling the Student Accounts Office with accepted credit card information or online through WebAdvisor. When making a payment, a student must indicate the amount of the Campus Card payment along with his/her account number. A minimum of \$20 can be placed on the Campus Card and will be available in the account the next business day after receipt. A credit card deposit is available immediately. Any account balance remaining at the end of the academic year will be credited to the student's account and refunded. A \$25 charge is assessed for lost Campus Cards.

## **Check Cashing**

Any student with a valid Campus Card may cash personal checks up to \$100 per day at the Student Accounts Office cashier's window during posted hours.

A \$25 returned check fee will be charged to students who cash checks that are later returned to the University for non-sufficient funds. If a third check is returned, check-cashing privileges are revoked.

## **Health Insurance**

All full-time students are required to have health insurance coverage through their family policy, an individual policy or through the University-sponsored health and accident plan. Full-time undergraduate students are billed automatically for the coverage and may waive the University-sponsored health and accident plan by completing a waiver that documents private insurance coverage at [www.academichealthplans.com/philau/2012-2013](http://www.academichealthplans.com/philau/2012-2013) or by accessing the "Health Insurance Waiver" link via WebAdvisor under the Billing Information section. The waiver must be completed by the second Friday in September for the fall semester. Students beginning their studies in the spring semester must complete the waiver by the first Friday in February. All international students are required to present proof of health insurance at the beginning of each semester. The director of Health Services will determine if the student's insurance is adequate for coverage in the United States. The charge will be added to your bill unless proof of insurance is provided to the Health Center before the specified date. International students may not use the online waiver option.

For more information about University requirements and the University-sponsored health insurance plan, visit on the web.

## **Tuition Insurance**

Philadelphia University has contracted with A.W.G. Dewar to provide students with tuition insurance. Full-time day students are billed a flat rate per semester for the plan which insures each student's comprehensive tuition and fee charges (and housing and meal plan for on-campus students). Part time students are billed for tuition insurance on a per credit basis and the coverage insures the student's tuition charges only. A tuition insurance claim may be filed in the event that a student must withdraw from the University due to a serious illness or accident after the published tuition refund deadlines. This coverage will be billed automatically each semester, including the summer terms. Students may opt to waive this coverage via WebAdvisor. The waiver is good for the academic year and will need to be renewed annually. Students who opt to waive the tuition insurance coverage will be responsible for billed expenses if they require a medical withdrawal after the published tuition refund dates. The annual tuition insurance waiver deadlines are the same as those outlined under Health Insurance. Claim forms for the tuition insurance are available in the Student Accounts Office.

## Financial Aid

*Financial Aid Office 215.951.2940, [financialaid@PhilaU.edu](mailto:financialaid@PhilaU.edu), [www.PhilaU.edu/financialaid](http://www.PhilaU.edu/financialaid)*

At Philadelphia University we believe that no student should be denied the opportunity for post-secondary education solely because of lack of adequate financial resources. In keeping with this philosophy, the Financial Aid Office provides information to students about financial planning and distributes financial aid resources to qualified students. The amount of financial aid available to any student is based on academic performance, need and the availability of funds. A financial aid consumer booklet is available on request from the Financial Aid Office located in the White Corners building.

### HOW TO APPLY

*Submit the FAFSA at [www.fafsa.gov](http://www.fafsa.gov) by April 15. Federal school code is 003354.*

To apply, students should submit a Free Application for Federal Student Aid (FAFSA) electronically at [www.fafsa.gov](http://www.fafsa.gov), by April 15. Philadelphia University's federal school code is 003354. Applicants are considered for all types of aid for which they might qualify. Entering students must be accepted for admission before their requests for aid can be considered. Late applicants will be considered as long as funds continue to be available. All financial aid, with the exception of Federal Work Study, is credited to the student's account at the beginning of each semester.

Aid awards are made for one academic year at a time. Students must submit new financial aid applications each year by April 15 to qualify for financial aid assistance. Renewal awards are based on academic performance and continuing financial need. Aid may be withdrawn if a student fails to make satisfactory academic progress, fails to report financial aid from sources outside the University, owes a refund on a federal or state grant or is in default on a student loan.

### TYPES OF AID AVAILABLE

**Federal Pell Grant:** A Federal Pell Grant is a grant administered by the U.S. Department of Education. Grants may range up to \$5,550 per year for undergraduate students with financial need.

**Federal Supplemental Educational Opportunity Grant (SEOG):** Federal SEOG is a grant program administered by the University. Awards are based on need and other grant eligibility.

**Federal Perkins Loan:** The Federal Perkins Loan program provides students with long-term, low-interest loans for educational expenses. The amount that can be made available to an applicant is based on the student's computed financial need and available funding.

Students are eligible to borrow up to \$5,500 during one academic year, but no more than \$27,500 during the period he/she is a full-time student. No interest is charged while at least half-time status is maintained.

First-time Perkins Loan recipients must complete an entrance interview at [www.mappingyourfuture.org](http://www.mappingyourfuture.org).

Repayment of the loan with interest at five percent per annum on the unpaid balance begins either six or nine months after the student graduates, terminates student status or becomes less than a half-time student. Repayment must be completed within 10 years after the interest begins to accrue.

**Federal Work-Study Program:** The Federal Work-Study Program is designed to stimulate and promote the part-time employment of college students who have demonstrated financial need and who require the wages from the employment to pursue their studies. Students in the Federal Work-Study Program are employed by the University. Students are paid biweekly for the hours worked during the preceding pay period. Federal Work-Study is not deducted from the student's tuition invoice. Employment under the Federal Work-Study Program is awarded as part of the financial aid package.

The Financial Aid Office assists in matching students with a job based on completion of an online job application form

**Federal Direct Stafford Loan:** Loans are available to students enrolled for at least six credit hours per semester. Students may borrow up to \$3,500 per academic year for the freshman year, \$4,500 for the sophomore year and \$5,500 per academic year for the junior and senior years. The total amount outstanding that students may borrow for undergraduate study is \$23,000.

The annual interest is a fixed rate at 6.8 percent as of July 1, 2012. The government will pay this interest until six months after a student has terminated his/her studies, or dropped below half-time status, at which time the student must begin repayment of the principal and interest.

There is a 1.0 percent loan-origination fee deducted from the face value of the loan.

Under current regulations, all applicants must pass a needs test to qualify for this loan. A FAFSA must be filed prior to certification of a loan application by the University. The student must maintain satisfactory progress to renew the loan.

An application for a Federal Direct Stafford Loan can be completed *at [www.studentloans.gov](http://www.studentloans.gov)*. If a paper application is preferred, please contact the Financial Aid Office and we will send you one. Sample repayment plans for Federal Direct Stafford Loans are available on our webpage.

**Entrance and Exit Interviews:** Federal law requires that every student receiving a Federal Direct Stafford Loan through Philadelphia University must complete both an entrance and exit interview. These sessions are completed online at *[www.studentloans.gov](http://www.studentloans.gov)*.

**Unsubsidized Federal Direct Stafford Loan:** The Unsubsidized Federal Direct Stafford Loan provides students who do not qualify for all or part of the Federal Direct Stafford Loan due to need restrictions the opportunity to obtain a low-interest loan. The annual limits a student can borrow are identical to the Federal Direct Stafford Loan program. Under a new federal program, students can borrow an additional \$2,000 of unsubsidized loan when coupled with their existing Stafford Loan amount. The distinguishing feature of the Unsubsidized Federal Direct Stafford Loan is that the interest of 6.8 percent begins to accrue upon disbursement of the loan. Principal payments start six months after the student leaves the University or drops

below half-time status. Application procedures are identical to those for a Federal Direct Stafford Loan.

**Federal Direct Plus Loans:** Parents of dependent undergraduates may borrow up to the student's cost of attendance minus any estimated financial aid. Eligibility is based on the borrower's credit rating. The annual interest rate is a fixed rate at 7.9 percent. Repayment of principal and interest begins 60 days after the loan is disbursed. All PLUS borrowers have the option of deferring the payment of the PLUS Loan interest and principal until after the student graduates or drops to less than half-time status. Applications for the PLUS Loan are available at [www.studentloans.gov](http://www.studentloans.gov).

**Philadelphia University Grants:** Philadelphia University Grants are offered to full-time undergraduates who have established financial need. The selection is made by the Financial Aid Office.

**Faculty Scholarships and Grants:** Scholarships and grants are awarded to students based on academic performance at the time they enter the University. These awards are renewable each year of full-time enrollment as long as minimum grade-point average requirements are met.

**Pennsylvania Higher Education Assistance Agency (PHEAA):** PHEAA is a state grant program for undergraduate Pennsylvania residents who will be enrolled full time (12 or more credit hours per semester).

All Pennsylvania residents applying for financial assistance from Philadelphia University are required to apply for a PHEAA grant.

**Other State Grant Programs:** Delaware, Connecticut, Massachusetts, Ohio, Rhode Island, Vermont and West Virginia, along with some other states, offer state grant awards to students who are residents of these states. Students should contact the appropriate state grant agency for more information.

**Privately Sponsored Scholarships:** Most libraries have books and brochures that list hundreds of scholarships and loan programs. Many of these awards are given to students meeting special conditions such as membership in an ethnic group or religion, academic major, parental employment or labor union association and parent or student fraternal affiliation.

**Veterans and Veterans' Dependent Benefits:** The Post 9/11 GI Bill is for individuals with at least 90 days of aggregate service on or after September 11, 2001. This new GI bill also has a transferability component allowing service members to transfer unused educational benefits to immediate family members. For additional information regarding the Post 9/11 GI Bill go to [www.gibill.va.gov](http://www.gibill.va.gov). Veterans who served on continuous active duty for 181 days or more after January 31, 1955 may be eligible for educational benefits under the Montgomery G.I. Bill or Veterans Educational Assistance Program (VEAP). In addition, a variety of loans, employment opportunities and other forms of financial assistance are available to veterans. A student who is the dependent of a veteran who died or is permanently disabled as a result of service in the armed forces and students who are serving in the reserves may be eligible for educational benefits. The Financial Aid Office has further information or contact the Veterans Administration at [www.va.gov](http://www.va.gov).

*Yellow Ribbon Program-Philadelphia University also participates in the Yellow Ribbon Program. Contact the VA at [www.va.gov](http://www.va.gov) for more information regarding the qualifications for that program.*

**Tuition Exchange Program:** Philadelphia University is a member of the Tuition Exchange Program. If a parent is employed by a participating college or university, students may be eligible for consideration through the Tuition Exchange Program. Interested persons should contact their place of employment or the University Financial Aid Office for more information.

**Philadelphia Partnership Scholarships:** Five annual scholarships are given to graduates of Philadelphia's comprehensive public high schools. Selection is made based on demonstrated academic excellence and motivation. Students may contact their high school guidance counselor or the Financial Aid Office for additional information.

**Pennsylvania Governor's School of Excellence:** Participants in the Governor's School of Excellence may be eligible for five scholarship awards through the University. Students must be in the top quintile of their high school class and have minimum SATs of 1000.

**Athletic Scholarships:** Athletic scholarships are available in men's and women's varsity sports. The number of scholarships, the requirements, academic standards and awards are controlled by Philadelphia University and by the NCAA regulations for men's and women's varsity sports. Contact the Department of Athletics at 215.951.2720 for more information.

**Federal Income Tax Credits:** The American Opportunity Tax Credit offsets the cost of tuition, fees, course-related books, supplies and equipment for higher education by reducing the amount of income tax for which you are liable. In addition, the credit is partially refundable-meaning that you may be able to claim the tax credit and receive a check from the IRS even if you owe no income tax. The amount of the credit can be up to \$2,500 per student and income restrictions apply. For more information, contact the Internal Revenue Service at [www.irs.gov](http://www.irs.gov).

**Endowed and Gift Scholarships:** Each year, the University receives funds for a limited number of scholarships for eligible students. Although donors may place some restrictions on these funds, academic achievement and need are the primary factors to be considered in determining scholarship eligibility. However, a limited number of scholarships are based solely on academic excellence.

*Scholarships include:*

**MARIANNE ABLE SCHOLARSHIP:** Established in memory of the director of Career Services to help a needy junior or senior dedicated to completing his/her education.

**JOEL M. ALPERIN SCHOLARSHIP:** For Fashion Industry Management majors who need financial assistance.

**ALUMNI SCHOLARSHIP:** For deserving students in any curriculum.

**AMERICAN APPAREL MANUFACTURERS ASSOCIATION:** For freshmen students studying apparel.

**PHYLLIS ARMON MEMORIAL SCHOLARSHIP:** For a Textile Design major in need of financial assistance.



THE ASSOCIATION FOR CONTRACT TEXTILES SCHOLARSHIP: For a junior or senior Textile Design major with need and a 3.0 G.P.A.

THOMAS M. BAGLEY SCHOLARSHIP: For a male student studying fashion design from the greater Philadelphia region.

THE DOROTHY BECHTEL SCHOLARSHIP AWARD FOR DESIGN EXCELLENCE: For deserving students pursuing a degree in either Fashion Design or Interior Design who have completed sixty (60) credits toward their degree.

BENJAMIN BELLEMERE SCHOLARSHIP: For a student who is a member of the Phi Psi fraternity and demonstrates financial need.

THE BETHLEHEM CONSTRUCTION CORP./WOLANIN COMPANIES LTD./WOLANIN FAMILY/PRIVATE SKY<sup>®</sup> AVIATION SERVICES SCHOLARSHIP: This scholarship, established by Vincent M. Wolanin and Gregory M. Wolanin, is made in memory of their father, Vincent J. Wolanin, a Pennsylvania Law Enforcement Officer who died suddenly while they were young, and also in tribute to their mother, Julia Solecki Wolanin, who raised them both through difficult times. Vincent '69 and Gregory '74 both are graduates of Philadelphia University. This scholarship will be awarded to a student who demonstrates financial need, as determined by the University's Financial Aid Office, and who also demonstrates excellence in athletics and/or excellence in Architecture, Engineering, Design, Marketing, Management, Chemistry, Computer Information Systems or Computer Science. Special preference will be given to a student meeting the above criteria or one who is a relative or employee of Wolanin Companies Ltd. (or any of its affiliates) and to any student who may have suffered the unexpected, sudden or accidental death of a parent. You may visit the Wolanin Companies Ltd. website at [www.wolanin.com](http://www.wolanin.com) or [www.privatesky.net](http://www.privatesky.net).

RICHARD BLEILER MEMORIAL SCHOLARSHIP: Given to a deserving student.

BOBBIN PUBLICATIONS SCHOLARSHIP: To a student in Fashion Industry Management.

KENNETH H. BOYDELL SCHOLARSHIP: For a deserving textile student in need of financial assistance.

THE RICHARD H. BRAUTIGAM SCHOLARSHIP: For a deserving undergraduate who demonstrates a strong determination to succeed.

BENETT BREGER-SRS TEXTILES/YMA SCHOLARSHIP: Awarded to juniors or seniors, with at least a 3.0 G.P.A., financial need, majoring in Engineering, Textile Design, Textile Engineering or Textile Technology.

**BURLINGTON INDUSTRIES SCHOLARSHIP:** established to provide financial support to the dependents of the employees of International Textile Group. If there are no eligible students, students from North Carolina, South Carolina or Virginia studying Textile Design, Textile Materials Technology, Fashion Industry Management, Fashion Design or Fashion Merchandising will be considered.

CAROLINA ALUMNI SCHOLARSHIP: For a deserving student beginning in the student's sophomore year, who is majoring in Textiles, demonstrates financial need and academic

excellence in their field of study. The student must be a permanent resident of North Carolina or South Carolina.

**JOSEPH CATAGNUS SCHOLARSHIP:** For a needy student; preference is given to a visually-impaired student or to a veteran.

**CHARMING SHOPPES, INC. SCHOLARSHIP:** Award for Academic Excellence - for a senior with a 3.0 G.P.A., demonstrated financial need, majoring in Accounting, Apparel, Design, Finance, Marketing or Textiles.

**LIZ CLAIBORNE SCHOLARSHIP:** For a needy minority student.

**BERT COHEN MEMORIAL SCHOLARSHIP:** For a textile student who demonstrates financial need.

**HOWARD C. COLE MEMORIAL SCHOLARSHIP FUND:** For a student studying Textile Design, Textile Materials Technology or Management.

**ED COMBS MEMORIAL SCHOLARSHIP:** For qualified international students in pursuit of a degree in textiles, apparel or chemistry with a minimum 3.0 G.P.A. who demonstrates a serious commitment to their field of study. Preference is given to the employees of Levi Strauss & Company International Group and their children.

**EDWARD M. COPELAND MEMORIAL SCHOLARSHIP:** Awarded to a soccer player based on need; first priority is given to a Delaware Valley resident.

**JOHN AND TARA COUCH SCHOLARSHIP:** For a deserving freshman student.

**EMILY M. CRANE SCHOLARSHIP:** For deserving students in any curriculum.

**CRANSTON FOUNDATION SCHOLARSHIP:** For a deserving student in any curriculum.

**GERDA AND FREDERICK CUNDELL SCHOLARSHIP:** For a deserving student in the Pre-med program.

**CHARLES B. DEGENSTEIN SCHOLARSHIP:** For residents of Snyder, Union and Northumberland counties in central Pennsylvania with financial need.

**DINING SERVICES SCHOLARSHIP:** For a student who has a 3.0 grade point average and has been employed by Dining Services for at least two semesters and plans to work there in the upcoming academic year.

**WILLIAM N. DONIGER SCHOLARSHIP:** For a deserving student in any curriculum.

**DOWNS SCHOLARSHIP:** Awarded to a freshman student from the Philadelphia area who graduated in the top 20 percent of his/her high school class and whose SAT scores placed the student in the top 25 percent of those taking the test. The student must also take some textile courses.

**ECHO DESIGN GROUP AWARD FOR ACADEMIC EXCELLENCE:** For a student with 80 or more credits studying Fashion Design or Textile Design.

**PHILLIP ELKIN MEMORIAL SCHOLARSHIP FUND:** For a deserving Business student.

**FASHION DESIGN FOR PARKINSON'S SCHOLARSHIP:** For an eligible Fashion Design student.

**FASHION GROUP INTERNATIONAL-LIBBY HAYNES HYMAN SCHOLARSHIP:** Established in memory of Libby Haynes Hyman to acknowledge her many contributions to the fashion industry and to fashion design education. For students studying Fashion Design, Textile Design, Fashion Industry Management or Fashion Merchandising and to encourage talented and highly-motivated students to pursue a career in the fashion industry.

**FASHION INDUSTRY ASSOCIATION SCHOLARSHIP:** For a student majoring in Fashion.

**IRVING FISHON MEMORIAL FOUNDATION SCHOLARSHIP:** Given to worthy Fashion Industry Management students.

**FRED FORTESS TEXTILE/APPAREL SCHOLARSHIP:** A merit-based scholarship awarded to needy students in the areas of Fashion Industry Management and Textile Engineering.

**E.W. AND A.W. FRANCE SCHOLARSHIP:** For a deserving textile student.

**PEARL AND MURRAY FRUMKIN SCHOLARSHIP:** Established by the Textile Veterans Association; to a sophomore who demonstrates financial need and outstanding scholarship.

**JAMES P. AND ANNE M. GALLAGHER FAMILY SCHOLARSHIP FUND:** To a deserving student from the Philadelphia area.

**GERBER FAMILY SCHOLARSHIP:** To assist needy students who are studying abroad.

**HAROLD C. GIFT SCHOLARSHIP:** For a graduating senior from the Reading Area Senior High School, Reading, Pa.

**THE CLIFFORD M. GILPIN AWARD FOR EXCELLENCE IN TEXTILE STUDIES:** For a student enrolled in Textile Engineering, Textile Technology or Textile Design. Special preference shall be given to candidates in the Textile Engineering Program. Additionally, the award recipient shall have a grade point average of at least 3.5 and will be expected to demonstrate a strong commitment to their chosen career field, as well as involvement with an appropriate professional organization.

**DR. NANCY S. GOLDSMITH MEMORIAL SCHOLARSHIP:** For registered nurses enrolled in the Health Services Management program who have at least a 3.0 G.P.A. and a commitment to a career in the allied health services.

**RICHARD GOLDSTEIN MEMORIAL SCHOLARSHIP FUND:** For students with financial need, starting in their freshman year through graduation, maintaining a 3.0 grade point average in a textile-related field.

**THE DR. HERMAN GOLDSTINE AWARD:** Will be awarded annually to the architecture student who has presented the best thesis. Candidates for the award will be those students who are in their final semester (spring semester of the fifth year of study).

**PEGGY GOUTMANN SCHOLARSHIP:** For junior, senior or master's level students majoring in textiles.

**JULIA M. GRANBY SCHOLARSHIP:** For students studying either Textile Design or Fashion Design.

**BILLY HARRIS SCHOLARSHIP:** Named in memory of Billy Harris '74, the scholarship is given to students with financial need who demonstrate academic achievement, leadership skills and athletic ability.

**BUCKY AND LORRAINE HARRIS SCHOLARSHIP:** The Bucky and Lorraine Harris Scholarship has been established as an endowed scholarship under the guidance of the founding committee members and the University Development Office.

Selected students will have attained at least a sophomore status at the University; be involved with the Department of Athletics through recreation, office assistance or work study, but NOT be a member of an intercollegiate program; and will be used to assist in the management of the campus Fitness Center, along with assisting the facility director in daily building operations.

**IRENE HERVEY SCHOLARSHIP:** For a textile major who demonstrates financial need.

**H. NEWLIN HILL MEMORIAL SCHOLARSHIP:** For students enrolled in a textile curriculum who demonstrate financial need. First consideration will be given to dependents of AstenJohnson community employees.

**HOME FURNISHINGS ASSOCIATION OF THE DELAWARE VALLEY SCHOLARSHIPS:** To students majoring in Interior Design who demonstrate need.

**MICHELE IAMPIERI SCHOLARSHIP:** To an undergraduate student majoring in Fashion Design and who demonstrates financial need. Preference will be given to a student residing in Howard County, Maryland.

**THE LARRY KARLIN SCHOLARSHIP:** For an economically disadvantaged male and female undergraduate student in their junior year, majoring in a textile-related field, without regard to grade point average and who has successfully completed the Global Leadership Program (GLP). In those years when students (male and/or female) cannot be identified as having successfully completed the Global Leadership Program, the GLP selection criteria can be temporarily suspended so that the funds can be allocated to a student or students who meet the other selection criteria.

**JOHN J. KAUFMANN MEMORIAL SCHOLARSHIP:** For a freshman enrolled in a textile major demonstrating academic excellence and financial need.

**KEYSTONE WEAVING MILLS SCHOLARSHIP:** For a deserving student enrolled in a textile, apparel or fashion design degree program who is at least at sophomore level and has need and a 3.0 GPA.

**BORIS KROLL SCHOLARSHIP:** For a student enrolled in Textile Design.

**ROGER LAVIALE SCHOLARSHIP:** To assist Philadelphia University students studying in Scotland at Heriot-Watt.

**LEVI STRAUSS/YMA SCHOLARSHIP:** For graduate-level textile and apparel students.

**MR. AND MRS. ROBERT LEVISON SCHOLARSHIP FUND:** For a deserving student enrolled in any degree-seeking curriculum.

**DR. GEORGE A. LINTON TRUST:** For a student enrolled in a Textile curriculum who demonstrates financial need.

**STEVEN GARY LITCHMAN MEMORIAL SCHOLARSHIP:** For a deserving student majoring in Textiles.

**LOCKYER FAMILY SCHOLARSHIP:** For a needy student from the greater Philadelphia region.

**THE CHRISTOPHER K. MCHUGH SCHOLARSHIP:** For a deserving undergraduate student in their junior year who has demonstrated financial need and a strong determination to succeed.

**MEMORIAL SCHOLARSHIP:** For a deserving student.

**WILLIAM JOSEPH MILOWITZ SCHOLARSHIP:** For deserving and underprivileged students who meet the academic requirements of the University.

**KRISTINE A. MINNICK SCHOLARSHIP:** To a deserving Physician's Assistant student in the fifth year of school with a minimum 3.3 GPA and need. Applications are to be submitted to the Physician's Assistant Program Director.

**MISCELLANEOUS ENDOWED SCHOLARSHIP:** For deserving students in any curriculum.

**MICHAEL AND EVELYN MUTOLESE SCHOLARSHIP:** For a student who has financial need and is studying Textiles, Apparel or Fashion Merchandising.

**THE RUTH AND MORRIS NISSMAN SCHOLARSHIP:** For a deserving U.S. citizen, without regard to major, who demonstrates creativity (in any discipline) and empathy for others. Special consideration will be given to a student who has challenges to overcome and demonstrates the resolve to build a better world. The scholarship will be effective beginning in the student's freshman year and will continue into succeeding years, if the recipient continues to maintain a G.P.A. above 2.5 and demonstrates a commitment to creating understanding within the University and broader community.

**OFFICE DEPOT SCHOLARSHIP:** For deserving students in any curriculum.

**PHILADELPHIA MENS AND BOYS APPAREL ASSOCIATION SCHOLARSHIP:** For a student majoring in Fashion Industries Management or Apparel.

**PHILADELPHIA TEXTILE ASSOCIATION SCHOLARSHIP:** For a student who is majoring in one of the Textile fields. Preference is given to a Philadelphia-area resident.

**PHILADELPHIA WOOL AND TEXTILE ASSOCIATION AWARD:** For a deserving textile student with 60 or more credits, who demonstrates need and is actively involved with a campus-based or community-based service organization.

**HARRY REIMER SCHOLARSHIP:** For a well-deserving student in any curriculum.

**THE ARTHUR B. ROBERTSHAW JR. SCHOLARSHIP:** For junior- or senior-level students studying Textiles.

**ROCKIN' CHRISTMAS ENDOWED SCHOLARSHIP FUND:** For a strong academically-qualified student from Lee County, Florida, or a student demonstrating high levels of excellence in

academics and athletics and/or math, science, music, chemistry, biology or architecture and/or has lost a parent due to illness or sudden death.

**THE HAROLD RONSON SCHOLARSHIP FUND:** For deserving students in any curriculum.

**ARTHUR SALAMAN SCHOLARSHIP:** For a deserving student athlete with need and a 3.0 G.P.A.

**SCHLESINGER SCHOLARSHIP:** For a student in any curriculum.

**THE SCHWAB FAMILY SCHOLARSHIP:** Awarded to a junior Fashion Merchandising or Fashion Industry Management student with a 3.0 G.P.A.

**THOMAS R. SHIRLEY, SR. SCHOLARSHIP:** For a deserving student from the Roxborough, Manayunk or East Falls neighborhoods or a student from the Philadelphia area.

**JOHN SICHEL MEMORIAL SCHOLARSHIP:** For a deserving student in any area of study.

**ALLEN SIRKIN SCHOLARSHIP:** Awarded to a needy student enrolled in Fashion Industry Management or Textiles.

**RICHARD D. SMITH MEMORIAL SCHOLARSHIP:** A scholarship restricted for a Textile major.

**W.W. SMITH CHARITABLE TRUST:** Given to academically qualified students from middle-income families, usually not eligible for federal and state grant assistance.

**ARTHUR SOBEL SCHOLARSHIP:** For deserving students enrolled in the Textile Design, Textile Engineering or Chemistry programs.

**THE JOHN L. STEEN SCHOLARSHIP/FELLOWSHIP:** For a U.S. citizen who is a full-time undergraduate student majoring in Textile Engineering, Industrial and Systems Engineering with a minor in Textile Engineering, Textile Technology, Textile Design or Textile Management and Marketing (must be a concentration in either apparel, fabric development, quality assurance or textile production.) The Steen Scholarship for undergraduate students will be effective beginning in the student's sophomore year and continue into succeeding years if the recipient maintains a grade point average above 3.0 (grading scale 4.0) and demonstrates a commitment to their chosen career field.

In the event that an undergraduate student is not available, the John L. Steen Graduate Fellowship must be awarded to a U.S. citizen who is a full-time graduate student majoring in Textile Engineering. The Steen Fellowship will continue into succeeding years if the recipient maintains a grade point average above 3.0 (grading scale 4.0).

The recipient, either an undergraduate or graduate student, is expected to demonstrate leadership skills and actively participate in community service.

In all cases, a resident of the State of New Jersey will be given preference.

**BERNARD STEUR SCHOLARSHIP:** For a Textile Engineering student with a strong interest in knitting.

**FLORENCE STEWART ENDOWED SCHOLARSHIP:** For a deserving student from Asia, particularly from Singapore or Indonesia.

**BERTRAM A. STROOCK SCHOLARSHIP:** For a deserving student.

**MICHAEL T. SULLIVAN MEMORIAL SCHOLARSHIP:** For deserving students in part-time evening programs; awarded annually.

**TEXTILE DISTRIBUTORS ASSOCIATION SCHOLARSHIP:** Given to students in need of financial assistance and enrolled in Textile curricula.

**TEXTILE VETERANS ASSOCIATION SCHOLARSHIP:** For a sophomore who demonstrates financial need and outstanding scholarship.

**W. FRANK UHLIG SCHOLARSHIP:** Preference is given to a student studying in textile and chemistry.

**THE UNDER FASHION CLUB, INC. SCHOLARSHIP AWARD:** To a junior-level student to encourage talented Fashion Design and Textile Design students to pursue careers related to the intimate apparel segment of the industry.

**UPS SCHOLARSHIP:** Distributed by the Association of Independent Colleges and Universities of Pennsylvania to a deserving student selected by the University's Financial Aid Office.

**KELLY MARIE VOGDES SCHOLARSHIP:** established in memory of Kelly Marie Vogdes, who graduated from Philadelphia University in 2001, for students studying Fashion Merchandising and who are graduates of Camden Catholic High School.

**FREDERICK WASSON SCHOLARSHIP:** For students in any major.

**MARTIN WEINER SCHOLARSHIP:** Preference is given to Korean or other international students.

**JOEL B. WEINSTOCK MEMORIAL SCHOLARSHIP:** For a Textile Design or Interior Design major.

**WHITESIDE GIFT SCHOLARSHIP:** Based on a combination of financial need and merit, preference will be given to a student enrolled in the School of Business Administration.

**J. BYRON WOLBACH SCHOLARSHIP:** For a student majoring in Textile Engineering, Textile Technology or Textile Design. First consideration given to dependents of Lawrence Schiff Silk Mills employees.

**WILLIAM WOOD FUND SCHOLARSHIP:** For a student deemed deserving.

**YOUNG MENSWEAR ASSOCIATION OF THE MEN'S APPAREL INDUSTRY ENDOWED SCHOLARSHIP:** For a deserving student enrolled in a textile or apparel program.

**YOUNG MENSWEAR ASSOCIATION OF THE MEN'S APPAREL INDUSTRY GIFT SCHOLARSHIP:** Given to students who are pursuing educational courses that will benefit the men's apparel/textile industry and who have a demonstrated need for financial assistance.

## **AID POLICIES**

### **Academic Progress Requirements**

The University is required to establish satisfactory academic progress standards for its federal financial-aid recipients in accordance with the U.S. Department of Education regulations. These standards ensure that only those recipients demonstrating satisfactory progress toward the completion of their educational programs continue to receive financial aid.

Whether a student is considered to be making satisfactory academic progress depends on successful semester completion of courses (credit hours), cumulative grade point average (GPA) and maximum time limits to complete their course of study. Students must meet all the requirements listed below:

- Semester Completion Requirement - A student must have earned hours equal to at least 75 percent of cumulative hours attempted to remain in good standing. Students earning less than 75 percent of the cumulative hours attempted will be placed on financial-aid probation.
- Attempted hours are defined as the hours for which the student is enrolled and charged as of the census date of each semester. Earned hours are defined as the sum of hours for which a student has earned a grade of A, B, C or D. Withdrawals, incompletes, audits and failures are not earned hours. Passing grades received for pass/fail courses are considered attempted and earned hours; failing grades in pass/fail courses are considered attempted but not earned. Repeated courses are included in the calculation of attempted and earned hours.
- Grade Point Average Requirements - Students must maintain a cumulative grade point average (GPA) of 2.0 or have academic standing consistent with the requirements for graduation, as determined by the University. Philadelphia University's academic standards are outlined in this undergraduate course catalog.
- Maximum Time Limit Requirements - A student's eligibility for financial aid will be terminated once they have attempted more than 150 percent of the normal credits (as defined in the undergraduate course catalog) required for your degree program. All attempted hours are counted, including transfer hours, whether or not financial aid was received or the course work was successfully completed.
- Evaluation of Academic Progress - A financial aid recipient's satisfactory academic progress is evaluated after each semester of the academic year. At that time, a student will either be in good standing, be placed on financial aid probation warning status or be placed on financial aid probation. Financial aid probation will require an appeal for aid reinstatement and an academic plan coordinated with the student's academic advisor. This plan will be the new standard by which the student will be evaluated for academic progress. The student must meet all three progress requirements (completion rate, GPA and be within the maximum time frame) to remain in good standing. Student will be notified by the Financial Aid Office, if he/she is placed on probation or denial status for financial aid.
- Warning status - Warning status will not prevent the student from receiving financial aid. The probationary semester is meant to inform the student of potential academic problems and provide time for corrective action. If a student does not meet the satisfactory academic progress standards after the probationary period, probation status could be imposed. Probation status will prevent the student from receiving any Title IV, and institutional financial assistance for future enrollment until such time as the student meets all satisfactory academic progress standards.



- Appeal and Reinstatement - Students may appeal their probation status by submitting an Appeal Form to the Director of Financial Aid, along with an academic plan coordinated with the student's academic advisor. Appeal forms are included in the letter informing students of their probation status and should be submitted to the Financial Aid Office.

Some circumstances such as medical problems, illness, death in the family, relocation, employment changes or personal problems can be considered for an appeal. Documentation verifying the situation may be requested.

Submission of the form is required within four weeks of receipt of the denial letter. The Director of Financial Aid will review the appeal and contact the student via letter as soon as a decision is reached.

Students can raise their GPA and/or satisfy credit deficiencies by taking additional course work at Philadelphia University without receiving financial aid. Students can eliminate credit deficiencies, but not GPA deficiencies, by successfully completing approved course work at another institution without receiving aid at that institution. Transfer credits used to satisfy credit deficiencies cannot be credits that were earned prior to the semester in which the student incurred the deficiencies. The student must submit a copy of the academic transcript to both the financial aid and registrar's office.

The policy does not preclude a student from enrolling in subsequent semesters. Students may have their financial aid reinstated by the Financial Aid Office once all satisfactory academic progress standards are met. It is the student's responsibility to inform the Financial Aid Office once they have fulfilled the necessary requirements.

**Repeat coursework** – Students repeating coursework in which they received a passing grade more than two times will not be eligible to receive federal financial aid for those courses.

#### **Grade level advancement policy for Stafford Loan eligibility**

1-29	Freshman level
30-59	Sophomore level
60-89	Junior level
90-up	Senior level
120-up	(for Architecture students only) 5th year

#### **Tuition Refund Policy**

Effective Date of Withdrawal Refund Amount

Before Classes Start 100%

First Week of Classes 80%

Second Week 60%

Third Week 40%

Fourth Week none

Federal regulations mandate that students attending Philadelphia University who are federal financial aid recipients be processed for a refund if they withdraw before the 10th week of the semester.

### **Financial Aid Refund Check Policy**

Financial aid will be applied to tuition first. Any remainder must be applied to all other University charges before a refund check is issued. Students who are credited with aid in excess of their tuition and other charges will be mailed a refund check within 14 days of the financial aid disbursement to their student account. Financial aid typically disburses after the second week of classes. Students can sign up in QuikPAY for direct deposit of their refund. The parent borrower will be refunded, by mail, any excess funds resulting from a Parent PLUS loan.

### **Return of Title IV Funds**

The Office of Financial Aid is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out or take a leave of absence prior to completing 60 percent of a payment period or term. The federal Title IV financial-aid programs must be recalculated in these situations.

Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula. The number of days completed up to the withdrawal date divided by the total days in the payment period or term equals the percent of the payment period or term completed. (Any break of five days or more is not counted as part of the term.) The percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid (100 percent minus the percentage of earned aid).

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student may be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution will offer the student a post-withdrawal disbursement via a letter, which, if accepted, must be paid within 120 days of the student's withdrawal. The student must accept or decline the post withdrawal disbursement within the time frame indicated in the letter.

Refunds are allocated in the following order:

- Unsubsidized Federal Direct Stafford Loans
- Subsidized Federal Direct Stafford Loans
- Federal Perkins Loans
- Federal Graduate PLUS Loans
- Federal Parent (PLUS) Loans
- Federal Pell Grants

Federal Supplemental Opportunity Grant

# Graduate Admissions

*For information on graduate degree programs, contact the Office of Graduate Admissions 215.951.2943 [gradadm@PhilaU.edu](mailto:gradadm@PhilaU.edu); [www.PhilaU.edu/graduate](http://www.PhilaU.edu/graduate)*

*Accreditation. Graduate programs at the University are approved by the Department of Education of the Commonwealth of Pennsylvania and accredited by the Middle States Association of Colleges and Secondary Schools. Accreditations associated with specific schools and programs can be found on the respective school/program webpages at [www.PhilaU.edu](http://www.PhilaU.edu).*

Graduate students are taught by a faculty that includes both full-time professors and experienced industry professionals and practitioners. Their academic credentials and industry experience make them uniquely qualified to provide students with the knowledge to become successful professionals in their chosen fields.

Graduate classes average about 18 students and are offered in the late afternoon/early evening hours and occasionally on Saturdays. Some graduate programs offer courses during the day. Students may begin graduate coursework in the fall (August), spring (January) or summer (May and July) semesters. Some programs enroll students throughout the calendar year. Others are limited to one start-term per year.

Any individual who has or is about to receive a bachelor's degree from a regionally-accredited university is eligible to apply. Graduate programs are designed to accommodate students from all undergraduate disciplines. The Admissions Committee admits those students who show the capacity and motivation to pursue a challenging graduate program.

For admission to the Ph.D. program in Textile Engineering and Science, please see page 305.

To apply, students must submit an application, official transcripts, statement of purpose, recommendations, current resume and in some cases, a portfolio of work (and appropriate standardized test scores). The standardized test requirement is waived for those students who hold a prior master's degree or who are C.P.A.s. Applications are accepted throughout the year for entrance in the fall, spring or summer semesters. Required application materials vary from program to program. When deciding to apply for admission, applicants should visit their desired program website for full application details.

*Note: International students may begin in fall and spring semesters only. Please refer to the graduate application for admissions procedures and instructions (see page 352).*

## **INTERNATIONAL STUDENTS**

Director of International Student Programs. *Located in The Kanbar Campus Center*  
215.951.2660

The University welcomes applications for admission from qualified international students. Persons who have completed their studies outside the United States must present all post-secondary school credentials. Such credentials must include all studies completed to date, marks or examination results received, degrees, diplomas and certificates earned. International applicants must submit an evaluation of academic credentials. While World Education Services (WES) is Philadelphia University's preferred evaluator, any evaluation service accredited

through the National Association of Credential Evaluation Services (NACES) will suffice. For a full listing of accredited evaluation services, visit [www.NACES.org](http://www.NACES.org). Documents must be authenticated or certified and those not written in English must be accompanied by notarized English translations. Courses at the University are taught in English; therefore, all international graduate students are required to take English reading and writing placement tests before registering for any courses. Exceptions: (1) If applicants gave a TOEFL computer-based score of 233 or higher (577 or higher for paper-based tests and 90 or higher for internet-based tests), they will not be required to take the placement tests before registering for courses. The IELTS (International English Language Testing System) will be considered as a possible substitute for the TOEFL. International students may begin in fall and spring semesters only. M.B.A. and M.S. in Taxation students may begin in the summer semester.

After acceptance is granted, an International Student Agreement Form (see page 367), a notarized Statement of Financial Support (see page 371) and official bank statements are required for the University to issue a SEVIS I-20 form.

### **English Language Requirement**

Courses at the University are taught in English; therefore, all international graduate students are required to take English reading and writing placement tests before registering for any courses. Students who have earned a bachelor's degree (more than 100 credits in residence) at a United States college or university are exempt from this requirement. Also, if students have scored a 233 or higher on the TOEFL computer-based test (577 or higher for paper-based test; 90 or higher for Internet-based test), placement tests are not required. The tests are scheduled by the staff in the Learning and Advising Center a few days before classes begin. If students miss the scheduled testing session, it is their responsibility to report to the Learning and Advising Center for testing before registering for classes. Based on the results of the placement tests, students might be required to take undergraduate ESL courses in reading and/or writing. Students required to take ESL courses in reading and/or writing (READ-098ESL, WRTG-100ESL) must receive a minimum grade of "C" in these courses to graduate. If students need extensive English preparation, it is University policy to have students complete an intensive English program elsewhere before enrolling in graduate courses. Any fees associated with these courses are the responsibility of the student.

### **ACCEPTANCE CLASSIFICATIONS**

Students may be admitted to a particular graduate program under one of the following acceptance classifications:

- **Acceptance**

Students who have met all admissions requirements with satisfactory performance as judged by the Admissions Committee are granted full acceptance. Full acceptance is granted only when the student's file is complete. A complete file includes all required application materials as listed on the Graduate Admissions or graduate program website. Where required, the standardized test requirement may be waived for those applicants who have completed a prior master's degree or are C.P.A.s.

*Note: Individual graduate programs may require additional admission materials for full acceptance.*

- **Probationary Acceptance**

Students with academic performance and/or test scores below the normally acceptable levels, but who show potential to be successful in a graduate program, may be granted probationary acceptance at the discretion of the Office of Graduate Admissions. Probationary students will be monitored closely by the program director during their first three courses. Failure to maintain a 3.0 or better GPA is cause for dismissal. After the completion of three courses, with a cumulative GPA of at least a 3.0, the probationary status may be removed at the discretion of the program director.

- **Conditional Acceptance**

The University reserves the right to grant conditional acceptance to students who are missing some of their application materials but who otherwise meet admissions criteria. Conditional acceptance is limited to one semester, during which time the missing application materials must be submitted. Completed application materials will then be reviewed for full acceptance. Individual programs have different requirements for conditional acceptance, and some programs do not offer conditional acceptance. Conditional admission is also granted when certain foundation courses are needed prior to starting core graduate program courses.

- **Non-Degree Acceptance**

In certain circumstances, a student may wish to apply as a non-degree student. To apply for non-degree status, students need to submit an admissions application and a transcript indicating the possession of a bachelor's degree. A maximum of three graduate courses may be taken as a non-degree student. Courses taken under non-degree status may be applied to a degree program, but only after all admissions requirements are met and full acceptance is granted. Acceptance as a non-degree student does not guarantee full acceptance into a graduate program. To change from non-degree to degree status, students must complete all admissions requirements and apply for a change of degree status to the Office of Graduate Admissions. Non-degree acceptance is not available for all programs.

- **Readmission**

Students who have not registered for two consecutive semesters (excluding the summer) must apply directly to the Office of Graduate Admissions for readmission. To be readmitted, students must be in good academic standing (minimum GPA 3.0) and must have no financial obligation to the University. Students must submit official transcripts from any institutions attended since leaving Philadelphia University. Readmission is also subject to available space in the program. Students should check with their program director upon re-entry to review any curriculum changes that may have occurred. Students may be asked to complete additional requirements to graduate.

## **DOCUMENTATION**

All documents received as part of the admissions procedure become the property of the University. They will not be duplicated, returned to the applicant or forwarded to any other

college, university, individual or agency. One copy of each of the transcripts will be released to the program director.

#### **STATEMENT OF PHILOSOPHY OF GRADUATE EDUCATION**

Graduate education at Philadelphia University is an extension of the University's mission to offer professional education. Programs combine theory and practice, scholarly research and application to produce graduates who are prepared for both senior levels of responsibility and further graduate study, including the doctorate. Curricula are organized around foundation, core, concentration and elective courses, and are taught by both full-time faculty and practicing professionals. Curricula are based on measurable learning outcomes developed by University faculty and professional standards as defined by both professional associations and practicing professionals.

# Graduate Financial Information

Billing questions? *Contact Student Accounts Office 215.951.5988 [studentaccounts@PhilaU.edu](mailto:studentaccounts@PhilaU.edu).*

*Go to [www.PhilaU.edu/studentaccounts](http://www.PhilaU.edu/studentaccounts) for more information.*

*Cashier located on the first floor of Archer Hall: Monday-Friday academic hours 9:30 a.m. to 4 p.m.; 9:30 a.m. to 4 p.m. summer hours.*

## **EXPENSES FOR 2012-2013**

### **TUITION AND FEES**

Graduate tuition for the 2012-2013 academic year is \$937 per credit hour. Credit by examination is \$937 per course. Graduates are charged a \$100 graduation fee. For full-time students enrolled in the Physician Assistant Studies Program the annual tuition is \$36,729. Graduate students who take day or evening undergraduate classes pay the graduate tuition rate for these classes. The tuition is \$774 per credit for students enrolled in the Midwifery Program only. An international student fee of \$55 per semester will be charged to all graduate students who are not U.S. citizens or permanent residents.

All graduate students in health sciences programs within the College of Science, Health and the Liberal Arts are required to have health insurance coverage through their family policy, an individual policy or through the University-sponsored health and accident plan. Graduate students in health sciences programs within the College of Science, Health and the Liberal Arts are also encouraged to participate in the Needle Stick policy. Other graduate students enrolled in at least three credits may choose to be enrolled in the University-sponsored plan. Open enrollment for the fall semester ends the second Friday in September and open enrollment for the spring semester ends the first Friday in February. Please note that enrollment in the University-sponsored plan requires students to also pay the semester Student Health Center fee. For information on the University-sponsored plan, please contact the Student Accounts Office.

In adherence with immigration laws, international students are required to have health insurance coverage. Documentation of adequate health insurance must be provided to the Student Health Center by the second Friday in September for the fall semester and by the first Friday in February for the spring semester. If documentation of adequate health insurance is not provided, the student's account will be charged for the University-sponsored health and accident plan. Adequate health insurance must include coverage for the academic year, be licensed to do business in the United States, have a U.S.-based office and a U.S. telephone number.

### **STUDENT BILLING**

*Student Accounts Office Located on the first and second floors of Archer Hall: Monday-Friday academic hours 9 a.m. to 5 p.m.; 9 a.m. to 4:30 p.m. summer hours.*

Tuition is due by the first day of each semester. Students may pay by one of the following options:

1. Remit payment in full
2. Monthly payment plan
3. Third Party Billing
4. Financial Aid

### **Monthly Payment Plan:**

Graduate students who wish to pay their tuition in monthly installments over the course of the semester must formally notify the University's Student Accounts Office. Our office will enroll



you in a payment plan with Tuition Management Services (TMS). There is a nominal enrollment fee for this interest free payment option. Notification will be required each semester and new enrollment with TMS will be required.

**Third Party Billing:**

Third Party Billing Authorization forms *are available online*.

Students whose employers offer tuition remission will need to submit this information to the Student Accounts Office by the first day of the semester. In the event of non-payment by the employer, the student will be responsible for all charges. Notification will be required each semester. Students whose employers offer tuition reimbursement will be responsible for paying the tuition by the first day of classes each semester and submitting the proof of payment to their employer for direct reimbursement.

**Financial Aid:**

To use financial aid, be certain all the proper forms are completed and approved by the Financial Aid Office before registering for courses. Questions about financial aid are handled by the Financial Aid Office. For detailed information regarding financial aid for graduate students, please visit [www.PhilaU.edu/financialaid/graduate](http://www.PhilaU.edu/financialaid/graduate).

**Tuition Insurance:**

Philadelphia University has contracted with A.W.G. Dewar to provide students with tuition insurance. Graduate and evening students are billed for tuition insurance on a per credit basis. Physician's Assistant students enrolled in the professional phase classes are billed a flat rate per semester for the plan which insures each student's comprehensive tuition charges. A tuition insurance claim may be filed in the event that a student must withdraw from the University due to a serious illness or accident after the published tuition refund deadlines. This coverage will be billed automatically each semester, including the summer terms. Students may opt to waive this coverage via WebAdvisor. The waiver is good for the academic year and will need to be renewed annually. Students who opt to waive the tuition insurance coverage will be responsible for billed expenses if they require a medical withdrawal after the published tuition refund dates. The annual tuition insurance waiver deadlines are the same as those outlined under Health Insurance. Claim forms for the tuition insurance are available in the Student Accounts Office.

Tuition is due by the first day of each semester. Checks should be made payable to Philadelphia University, P.O. Box 95000-4210, Philadelphia, PA 19195-0001, with the student's identification number clearly indicated on the face of the check. If the University receives a total of three non-sufficient funds (NSF) checks, all future payments must be made by cash, certified check or money order. Students may also use WebAdvisor to pay their account balances online by accessing the QuickPAY link under the Billing Information section. Electronic checks and credit card payments are accepted. There is no fee to pay by electronic check. Credit card payments will be assessed a 2.75% service fee. Philadelphia University accepts American Express, Discover and MasterCard for tuition payment.

## Financial Aid

Financial Aid Office: 215.951.2940 [financialaid@PhilaU.edu](mailto:financialaid@PhilaU.edu) [www.PhilaU.edu/financialaid](http://www.PhilaU.edu/financialaid)

Eligible students who are enrolled on at least a half-time basis (defined as at least 4.5 credits per semester) may apply for the Federal Perkins Loan, Federal Work Study, Federal Stafford Loan and Unsubsidized Federal Stafford Loans.

Types of Financial Aid Available:

### 1. Federal Perkins Loan:

The Federal Perkins Loan program provides students with long-term, low-interest loans for educational expenses. The amount which can be made available to an applicant is based on the student's computed financial need and available funding. A student is eligible to borrow up to \$5,000 during one academic year, but not more than \$30,000 for undergraduate and graduate study. No interest is charged while you maintain at least half-time status. Repayment of the loan with interest at five percent per annum on the unpaid balance begins either six or nine months (based on the conditions of your promissory note) after you graduate or terminate your student status or become less than a half-time student. Repayment must be completed within 10 years after the interest begins to accrue.

#### *Entrance Interviews*

Federal law requires that every student who has obtained a Federal Perkins Loan through Philadelphia University must have an entrance interview. This can be done at [www.aessuccess.org](http://www.aessuccess.org).

#### *Exit Interviews*

Federal law requires that every student who has obtained a Federal Perkins Loan through Philadelphia University must have the opportunity for an exit interview before leaving the University. This can be done online at [www.aessuccess.org](http://www.aessuccess.org). The Financial Aid Office will contact the borrowers prior to their anticipated graduation dates to remind them of the necessity for an exit interview.

### 2. Federal Work-Study Program:

The Federal Work-Study Program is designed to stimulate and promote the part-time employment of students who have demonstrated financial need and who require the wages from the employment to pursue their studies. Students in the Federal Work-Study Program are employed by the University. Students are paid bi-weekly for the hours worked during the preceding pay period. Federal Work-Study is not deducted from the student's tuition invoice. Employment under the Federal Work-Study Program is awarded as part of your "financial aid package."

The Financial Aid Office will attempt to match you with a job based on your job application form which will be sent with your award letter. You must maintain satisfactory progress to renew your employment.

### **3. Federal Stafford Loan (Subsidized and Unsubsidized):**

Loans are available to students enrolled for at least five credit hours per semester. You may borrow up to \$8,500 per academic year subsidized and \$12,000 per academic year unsubsidized, with annual limits totaling \$20,500 per academic year. The distinguishing feature of the Unsubsidized Federal Stafford Loan is that the interest must be paid by the student, on a quarterly basis, while the student is enrolled in school.

The total amount outstanding that you may borrow for undergraduate and graduate study is \$65,500 subsidized and \$138,500 combined subsidized and unsubsidized.

The annual interest is a fixed rate of 6.0 percent for the subsidized loan and 6.8% for the unsubsidized loan. The government will pay this interest on the subsidized portion of the loan until six months after you have terminated your studies or dropped below half-time status, at which time you must begin repayment of the principal and interest. Interest begins to accrue upon disbursement on the unsubsidized portion of the loan.

There may be a 3.0 percent loan-origination fee deducted by the bank from the face value of the loan. In addition, your lender may deduct an insurance fee of up to one percent.

Under current regulations, all applicants must pass a “needs test” to qualify for this loan. A Free Application for Federal Student Aid (FAFSA) must be filed at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) prior to certification of a loan application by the school. You must maintain satisfactory progress to renew your loan.

Electronic Stafford Loan applications are available at [www.aessuccess.org](http://www.aessuccess.org). Sample payment plans for Federal Stafford Loans are available at the Financial Aid Office.

#### *Entrance and Exit Interviews*

Federal law requires that when you borrow through the Federal Stafford Loan program for the first time, you must complete an entrance interview. In addition, when you graduate, withdraw, or enroll less than half-time, you must complete an exit interview. The entrance and exit counseling sessions can be completed online at [www.aessuccess.org](http://www.aessuccess.org).

### **4. Graduate PLUS Loan:**

The Graduate PLUS Loan allows the graduate student to borrow up to the calculated cost of attendance minus any other aid that the student is receiving. The interest rate is 8.5 percent. Applications and more information are available at [www.aessuccess.org](http://www.aessuccess.org).

### **APPLICATION PROCEDURES**

Philadelphia University requires that all students applying for aid file the Free Application for Federal Student Aid (FAFSA). This may be done online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Financial aid, regardless of its source, may not be automatically renewable. It is your responsibility to obtain the application forms and submit them once each academic year.

Call the Financial Aid Office at 215.951.2940 with questions.

### **GRADUATE ASSISTANTSHIPS**

A limited number of graduate assistantships are available to selected qualified incoming graduate students. Assistantships are competitive and require full-time enrollment. Compensation includes tuition remission for nine credits for each of the fall and spring

semesters and a stipend. Graduate assistants will receive “Guidelines for Graduate Assistantships” with their appointment letters. See pages 119-120 for information. Contact the Office of Graduate Admissions for more information or visit [www.philau.edu/financialaid/graduate](http://www.philau.edu/financialaid/graduate) for details.

### **VETERAN REGISTRATION**

The University meets all of the criteria for Veterans Education. The graduate programs have been approved for payment assistance. Veterans pay the cost of tuition, fees, books and supplies directly to the University. Veterans Administration education benefits are paid directly to the student on a monthly basis. Contact the University’s Financial Aid Office so that appropriate paperwork is filed with the V.A. on the student’s behalf.

### **WITHDRAWALS AND REFUND OF TUITION**

To initiate a leave of absence or withdrawal, a student must notify their program director in writing. A student is considered in attendance until the formal notification is completed. Federal regulations mandate that a stipulated refund calculation be used for any student receiving any form of federal financial aid who withdraws. A copy of this calculation is available at no charge from the University’s Business Office. Tuition for all other students who withdraw from the University will be refunded on the following basis:

Before 1st class meeting	100%
Before 2nd class meeting	80%
Before 3rd class meeting	60%
Before 4th class meeting	40%
After 4th class meeting	0%

**Online:** *(Online classes follow this refund policy regardless of log-in status)*

Before classes start	100%
First week of class	80%
Second week of class	60%
Third week of class	40%
Beginning of fourth week of class	0%

The date for calculating refunds is the date on the student’s written request for withdrawal. Failure to complete withdrawal in writing results in an unofficial withdrawal. Refunds, transcripts and recommendations will be withheld until this written request is received. The University uses Federal regulations to determine the refund of federal financial aid funds to the federal government. A copy of this federal refund calculation is available at the University’s Financial Aid Office.

Students dismissed from the University receive tuition refunds prorated from date of dismissal. Refunds for medical reasons will be reviewed on an individual basis. All refunds will be paid within 30 days of graduation or withdrawal/dismissal.

## **AID POLICIES**

### **Academic Progress Requirements**

The University is required to establish satisfactory academic progress standards for its federal financial aid recipients in accordance with the U.S. Department of Education regulations. These standards ensure that only those recipients demonstrating satisfactory progress toward the completion of their educational programs continue to receive financial aid.

Whether a student is considered to be making satisfactory academic progress depends on successful semester completion of courses (credit hours), cumulative grade point average (GPA) and maximum time limits to complete their course of study. Students must meet all the requirements listed below:

- **Semester Completion Requirement-** A student must have earned hours equal to at least 75 percent of total hours attempted for the semester to remain in good standing. Students earning less than 75 percent of the hours attempted will be placed on financial aid probation.
- **Attempted hours** are defined as the hours for which the student is enrolled and charged as of the census date of each semester. **Earned hours** are defined as the sum of hours for which a student has earned a grade of A, B, C or D. Withdrawals, incompletes, audits and failures are not earned hours. Passing grades received for pass/fail courses are considered attempted and earned hours; failing grades in pass/fail courses are considered attempted but not earned. Repeated courses are included in the calculation of attempted and earned hours.
- **Grade Point Average Requirements-** Students must maintain a cumulative grade point average (GPA) of 2.0 or have academic standing consistent with the requirements for graduation, as determined by the University. Philadelphia University's academic standards are outlined in the graduate course catalog.
- **Maximum Time Limit Requirements-** A student's eligibility for financial aid will be terminated once they have attempted more than 150 percent of the normal credits (as defined in the undergraduate course catalog) required for their degree program. All attempted hours are counted, including transfer hours, whether or not financial aid was received or the course work was successfully completed.
- **Evaluation of Academic Progress-** A financial aid recipient's satisfactory academic progress is evaluated after each semester of the academic year. At that time, a student will either be in good standing, be placed on financial aid probation or denied financial assistance for future enrollment periods. The student must meet all three progress requirements (completion rate, GPA and be within the maximum time frame) to remain in good standing. Students will be notified by the Financial Aid Office if they are placed on probation or denial status for financial aid.
- **Probation status-** Probation status will not prevent the student from receiving financial aid. The probationary semester is meant to inform the student of potential academic problems and provide time for corrective action. If a student does not meet the satisfactory academic progress standards after the probationary period, denial status could be imposed or continued probation approved. Denial status will prevent the student from receiving any Title IV and institutional financial assistance for future enrollment until such time as the student meets all satisfactory academic progress standards.

- **Appeal and Reinstatement-** Students may appeal their denial status by submitting an Appeal Form to the Director of Financial Aid. Appeal forms are included in the letter informing students of their denial status and should be submitted to the Financial Aid Office.

Some circumstances such as medical problems, illness, death in the family, relocation or employment changes or personal problems can be considered for an appeal. Documentation verifying the situation may be requested.

Submission of the form is required within four weeks of receipt of the denial letter. The Director of Financial Aid will review the appeal and contact the student via letter as soon as a decision is reached.

Students can raise their GPA and/or satisfy credit deficiencies by taking additional course work at Philadelphia University without receiving financial aid. Students can eliminate credit deficiencies, but not GPA deficiencies, by successfully completing approved course work at another institution without receiving aid at that institution. Transfer credits used to satisfy credit deficiencies cannot be credits that were earned prior to the semester in which the student incurred the deficiencies. The student must submit a copy of the academic transcript to both the financial aid and registrar's office.

The policy does not preclude a student from enrolling in subsequent semesters. Students may have their financial aid reinstated by the Financial Aid Office once all satisfactory academic progress standards are met. It is the student's responsibility to inform the Financial Aid Office once they have fulfilled the necessary requirements.

#### **RETURN OF TITLE IV FUNDS**

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out or take a leave of absence prior to completing 60 percent of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations.

Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

The number of days completed up to the withdrawal date divided by the total days in the payment period or term equals the percent of the payment period or term completed. (Any break of five days or more is not counted as part of the term.) The percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid (100 percent minus the percentage of earned aid).

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student may be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution will offer the student a post-withdrawal disbursement via a letter, which, if accepted, must be paid within 120 days of the student's withdrawal. The student must accept or decline the post withdrawal disbursement within the time frame indicated in the letter.

- Refunds are allocated in the following order:
- Unsubsidized Federal Stafford Loans
- Subsidized Federal Stafford Loans
- Federal Perkins Loans
- Federal Graduate PLUS Loans
- Federal Parent PLUS Loans
- Federal Pell Grant
- Federal Academic Competitiveness Grant (ACG)
- National Science and Mathematics Access to Retain Talent Grant (National SMART Grant)
- Federal Supplemental Opportunity Grant

## **SERVICES**

### **Health Services**

The Student Health Center *is located in Scholler Hall. Call 215.951.2986. To obtain a health insurance brochure contact the Student Accounts Office at 215.951.2633/2944.*

Health Services is available to all international graduate students. Other full-time graduate students may opt to utilize the services by paying the semester Student Health fee and submitting a Pre-matriculation Health Form. Arrangements to pay the fee can be made by visiting Student Health Services, located at the end of Scholler Hall adjacent to the Althouse Gym, or the Business Office.

The Student Health Center is open weekdays from 9 a.m. to 5 p.m. A Self-Care Station is stocked with common over-the-counter medications and health education brochures that are available to all students during the hours of operation. The Center is staffed by nurse practitioners who can meet most health care needs. Please feel free to call 215.951.2986 for an appointment or visit during walk-in hours. Information about the Center's hours can be found at [www.PhilaU.edu/healthservices](http://www.PhilaU.edu/healthservices). Students who require more comprehensive treatment are referred to local physicians, hospitals and laboratories at the student's expense.

### **Health Insurance**

All graduate students in health sciences programs within the College of Science, Health and the Liberal Arts are required to have health insurance coverage through their family policy, an individual policy or through the University-sponsored health and accident plan. Graduate students in health sciences programs within the College of Science, Health and the Liberal Arts are also encouraged to participate in the Needle Stick policy. All students are encouraged to have health-insurance coverage through their family policy, an individual policy or through the University-sponsored health and accident plan. Other graduate students enrolled in at least three credits may choose to be enrolled in the University-sponsored plan. Open enrollment for the fall semester ends the second Friday in September and open enrollment for the spring semester ends the first Friday in February. Please note that enrollment in the University-sponsored plan requires students to also pay the semester Student Health fee. For information on the University-sponsored plan, please contact the Business Office.

In adherence with immigration laws, international graduate students are required to have health-insurance coverage.

Students will be billed in July for a University-sponsored health and accident plan. In order to have this charge removed, documentation of adequate health insurance must be provided to the Student Health Center by the second Friday in September for the fall semester and by the first Friday in February for the spring semester. If documentation of adequate health insurance is not provided, the charge will remain on the student's account. Adequate health insurance must include coverage for the academic year and providers must be licensed to do business in the United States, have a U.S.-based office and a U.S. telephone number.

### **Housing**

While on-campus housing is reserved for undergraduate students, unreserved space is available for graduate students. The Office of Residence Life places graduate students on a first-come, first-serve waitlist for housing in the Philadelphia University Residences Falls Center complex. In addition, the Office of Residence Life provides listings of off-campus housing including apartment complexes and local rentals, and offers a yearly off-campus housing fair. For further information, please contact the Office of Residential Life at 215.951.2741.

### **On-Site Courses**

The University is prepared to offer graduate courses at an employer's location. Please call the appropriate program director or director of Graduate Admissions for details.

### **Parking**

All students must register their vehicles. Registration may be done at [www.PhilaU.edu/security/parking](http://www.PhilaU.edu/security/parking). A valid state registration and current insurance card must be presented, together with a current, valid University I.D., to pick up your parking permit at either the Safety and Security Office on the Ravenhill Campus, Monday through Friday, from 9 a.m. to 5 p.m., or during the first two weeks of the fall and spring semester from 5 p.m. to 7 p.m. in The Tuttleman Center lobby. For information, call the Safety and Security Office at 215.951.2620.

Fees:

Full-time Day Graduate Students	\$70/year
Part-time Day Graduate Students (under 12 hours)	\$15/year
Evening Graduate Students	No fee

### **Student Identification Card**

Student photo-identification cards are available to graduate students. During the first two weeks of classes, the University has extended evening hours to process new student identification cards in The Kanbar Campus Center. Students will need identification cards to check out books and access buildings, such as the library and computer center.



# Application for Admission to Graduate Programs

## Application

Submit the completed application along with a non-refundable fee of \$40 made payable to Philadelphia University. Please type or neatly print all information. Students are admitted for the fall, spring, winter or summer semesters, depending on the program. International students are admitted only for the fall and spring semesters with some exceptions. There may be limits to the number of openings available in each program. To apply online, visit the University's webpage at [www.PhilaU.edu](http://www.PhilaU.edu).

## Official Transcript

Arrange for an official transcript from each undergraduate and graduate school you have attended to be sent directly to the Office of Graduate Admissions. Failure to disclose attendance at an institution at the time of application may cause denial of application for admission. International applicants must have all post-secondary transcripts evaluated by an accredited academic credential evaluation service. This official evaluation is to be submitted to the office of Graduate Admissions in lieu of official transcripts or mark sheets. A listing of accredited evaluation services can be found at [www.NACES.org](http://www.NACES.org). World Education Service (WES) is Philadelphia University's preferred evaluation service. For information on World Education Service, please visit [www.WES.org](http://www.WES.org).

## Recommendations

Applicants may use the forms enclosed. You must have recommendations from two people who are not related to you and who are familiar with your professional and scholastic qualities forwarded to the Office of Graduate Admissions. Recommendations are not required for all graduate programs so be sure to check individual program application requirements.

## Standardized Test Results

Many graduate programs require the submission of standardized test scores. Request your Graduate Management Admission Test (GMAT) scores, Graduate Record Exam (GRE) scores or Miller Analogies Test (MAT) scores to be sent to the Office of Graduate Admissions. The University code number is 2666. The Miller Analogies Test (MAT) may be used in lieu of the GRE (except for Textile Engineering). The University code for the MAT is 1654. The standardized test requirement will be waived for those students already possessing a previous master's degree or those who are C.P.A.s. Applicants must submit documentation of a C.P.A. or a previous master's degree. Applicants should consult the graduate program webpage to learn whether submission of a standardized test score is required. Some graduate programs will award conditional admission, allowing new students to submit the standardized test by the end of the first semester.

### **Non-degree Candidates**

A student applying for admission to the graduate programs may elect to pursue non-degree study in which he/she may take graduate courses for professional certification or personal enrichment. To apply as a non-degree candidate, a student need only submit an application and transcript indicating a bachelor's degree was received. This option is limited to specific graduate programs. Applicants for non-degree study should contact the Office of Graduate Admissions to learn whether non-degree study within a specific program is an option.

### **International Applicants**

International graduate students may apply for fall or spring semesters only. M.B.A. and M.S. Taxation students may apply for the summer semester. In addition to the credentials listed above, all international applicants must present evidence of proficiency in English by taking the Test of English as a Foreign Language (TOEFL). A minimum score of 550 (paper-based), 213 (computer-based), or 79 (Internet-based) is required. Please send test results directly to the Office of Graduate Admissions. In addition to the application materials, all international applicants must submit a notarized Statement of Financial Support form, a signed International Student Agreement and a copy of official bank statements before an I-20 will be issued. If you have any questions or concerns, please feel free to call the Office of Graduate Admissions at 215.951.2943.

### **Mailing Address**

Director of Graduate Admissions, White Corners

PHILADELPHIA UNIVERSITY

4201 Henry Avenue

Philadelphia, PA 19144-5497

215.951.2943

Fax: 215.951.2907

Email: [gradadm@PhilaU.edu](mailto:gradadm@PhilaU.edu)

800.951.7287

# Graduate Assistantship Information

4201 Henry Avenue

Philadelphia, PA 19144-5497

Office of Graduate Admissions

215.951.2943

Philadelphia University offers a limited number of assistantships to selected, qualified, incoming graduate students each year. Assistantships are granted on a very competitive basis, and students in most graduate programs are eligible to apply. In exchange for working 20 hours per week fulfilling the assistantship responsibilities, recipients receive tuition remission for nine graduate credit hours in each of the fall and spring semesters and a stipend. Admission to a graduate program at the University is a prerequisite to consideration for appointment to an assistantship.

**Assistantship applications received by March 1 will be given priority consideration for the following fall semester (October 1 for students beginning in the spring semester).**

**CRITERIA:** To be considered for a graduate assistantship, the following minimum criteria must be met:

- Graduate assistantships available only to new incoming students.
- Acceptance to a graduate program.
- Enrollment as a full-time student (nine graduate credit hours each fall and spring term totaling 18 credit hours) while holding the assistantship.
- Minimum undergraduate grade point average (G.P.A.) of 3.25.
- Minimum standardized test scores as follows: GMAT 500, MAT 400, or GRE 1070 & 4.0 (analytical score). Should your academic program not require submission of a standardized test for admission, you will not be required to submit standardized test scores as part of your graduate assistantship application.
- Two professional letters of reference. (Note: These are in addition to the two admission recommendations.)
- Require no more than five foundation courses.
- Additional criteria, such as computer skills, research experience or other skills may be established for specific assistantships by the individual departments.

**TO APPLY:** The following application materials must be submitted.

- Graduate Assistantship Application
- Two letters of recommendation
- Resume and/or personal statement

- Copy of standardized test scores (if required by academic program)

**Note:** *All application materials must be submitted at one time. Materials (other than standardized test scores) that are submitted separately from the actual graduate assistantship application form will not be considered.*

**COMPENSATION:** Compensation is for one academic year (fall and spring semesters).

- Tuition remission for nine graduate credits each fall and spring semester.
- A modest stipend.

**Note:** *Assistantships will be renewed (for a maximum total of two years) on an annual basis based on school/department needs and satisfactory performance. Students must maintain a minimum GPA of 3.25 while holding an assistantship position.*

# Instructions for International Students

International graduate students who have been admitted to Philadelphia University are eligible to receive a SEVIS I-20 for application for an F-1 visa. Please review the following pages, as the information is intended to help you understand the steps you need to take from now until you arrive on campus.

Please note, the United States Department of Homeland Security (DHS) requires F-1 and J-1 visa applications to pay a one-time fee of \$100 to supplement the administration and maintenance costs of the Student and Exchange Information System (SEVIS). The fee must be paid at least three business days prior to applying for your visa, or applying for admission at a U.S. port-of-entry for those exempt from the visa requirement. The fee must be paid prior to submission of a change of status petition or reinstatement application. The fee can be paid to the DHS by mail or online and must be accompanied by a Form I-901. It can be paid by you or by a third party, inside or outside the U.S. If you are denied a visa, the SEVIS fee will not be refunded. However, if you reapply for a new F-1 visa within 12 months of the denial, you will not have to pay the fee again.

## To pay by mail

1. Obtain a Form I-901 "Fee Remittance for Certain F, J and M Non-immigrants."
  - a. Download the form from [www.FMJfee.com](http://www.FMJfee.com) OR
  - b. Request the form by phone at 1.800.870.3676 (inside the US)
2. Complete the Form I-901. Be sure to write your name exactly as it appears on your I-20 form.
3. Prepare a check, international money order or foreign draft (drawn on U.S. banks only) in the amount of \$100 USD, made payable to "The Department of Homeland Security."
4. Mail the completed Form I-901 and payment to the address listed on Form I-901.
5. A Form I-797 receipt notice should be mailed within three days of processing the fee. Be sure to make copies of your receipt, and keep it with your other important immigration documents.

## To pay online

1. Find the Form I-901 at [www.FMJfee.com](http://www.FMJfee.com).
2. Complete the form online and supply the necessary Visa, MasterCard or American Express information. \*Be sure to write your name exactly as it appears on your I-20 form.
3. Print a copy of the online receipt.
4. Be sure to make copies of your receipt, and keep it with your other important immigration documents.

**In order for the University to issue your SEVIS I-20, you must submit the following:**

- A completed and signed International Student Agreement Form (see page 347).
- A completed notarized Statement of Support Form (see page 351). Students supporting themselves do not submit this form.
- Official bank statements, no more than three months old.
- A Transfer Recommendation Form, for students currently studying in the United States. Photocopies of the student's last I-20 and most recent student visa are also required.

**Registration and Orientation**

Students must be on campus for International Orientation and registration at least one week prior to the start of classes. You will receive a mailing about orientation from the international student advisor approximately six weeks before classes begin.

**Tuition**

Graduate tuition for the 2012-2013 academic year is \$937 per credit hour. For full-time students enrolled in the Physician Assistant Studies Program the annual tuition is \$36,729. Graduate students who take undergraduate day or evening classes will pay the respective day or evening rate for these classes. An international student fee of \$55 per semester will be charged to all graduate students who are not U.S. citizens or permanent residents.

**Estimated Expenses**

- Tuition: \$16,866
- Room and Board: \$13,012
- Books, Insurance, etc.: \$3,500

**English Language Requirement**

Courses at the University are taught in English; therefore, all students are required to have proficiency in English. All international graduate students are required to take English reading and writing placement tests before registering for any courses. The tests are scheduled a few days before classes begin during orientation. If a student misses the scheduled testing session, it is his/her responsibility to report to the Learning and Advising Center for testing before registering for courses. Based on the results of the placement tests, a student may be required to take undergraduate English as a Second Language courses in reading and/or writing. In a case where a student is in need of extensive English preparation, it is University policy to have the student complete an intensive language program elsewhere before he or she enrolls in our graduate program. Any fees associated with these courses are the responsibility of the student.

**Full-time Student Status**

Requirements to maintain student status as mandated by the U.S. Bureau of Citizenship and Immigration Services:

- Have a valid passport and an F-1 student visa.

- Be a full-time student (for graduate students this means registering for at least nine credits per semester).
- First-year students may not work off campus, but may apply for permission to work after the first year if they can prove financial difficulty. (Permission is rarely granted, so students should not expect to work while in the U.S.)

# Application for Graduate Admissions

4201 Henry Avenue  
 Philadelphia, PA 19144-5497  
 Office of Graduate Admissions  
 215.951.2943

## Personal Information

Name: \_\_\_\_\_

Social Security Number: \_\_\_\_\_  Male  Female

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_

Date/Country of Birth \_\_\_\_\_

I am a  U.S. Citizen  Permanent Resident  International Student

If you are an International Student, are you applying for an F-1 Visa through our program?  Yes  No

If yes, country of citizenship: \_\_\_\_\_

What is your ethnicity?  Hispanic or Latino  Not Hispanic or Latino

What is your race?  White  Black or African American  Asian  
 American Indian or Alaska Native  Native Hawaiian or other Pacific Islander

## Registration Information

<b>Program of Study:</b>	
COLLEGE OF ARCHITECTURE AND THE BUILT ENVIRONMENT	KANBAR COLLEGE OF DESIGN, ENGINEERING AND COMMERCE
<input type="radio"/> M.S. in Construction Management	<input type="radio"/> Accelerated Evening M.B.A.
<input type="radio"/> M.S. in Interior Architecture	<input type="radio"/> One-Year Day M.B.A.
<input type="radio"/> M.S. in Sustainable Design	<input type="radio"/> Strategic Design Executive M.B.A.
	<input type="radio"/> M.S. in Fashion Apparel Studies
	<input type="radio"/> M.S. in Industrial Design
COLLEGE OF SCIENCE, HEALTH AND THE LIBERAL ARTS	<input type="radio"/> M.S. in Interactive Design and Media
<input type="radio"/> M.S. in Disaster Medicine and Management	<input type="radio"/> M.S. in Taxation
<input type="radio"/> M.S. in Midwifery	<input type="radio"/> M.S. in Textile Design, circle one: Print Weave Knit
<input type="radio"/> M.S. in Occupational Therapy*	<input type="radio"/> M.S. in Textile Engineering



<input type="radio"/> M.S. in Physician Assistant Studies*	<input type="radio"/> Ph.D. in Textile Engineering
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\* Both the M.S. in Occupational Therapy and the M.S. in Physician Assistant Studies Program utilize centralized application services. Please visit the respective program website for detailed application instructions. Philadelphia University does not require a supplemental application for Physician Assistant Studies applicants.

**Combined Degrees:**

B.S./M.B.A. Program (For current undergraduate start only)students at Philadelphia University only)

**Certificate Programs:**

- Business Bridge Innovation Certificate (summer
- Disaster Medicine and Management Certificate
- Post-Master’s Midwifery Certificate
- Sustainable Practices Certificate (spring start only)

**Entry Semester:**

- Spring (January 20\_\_)
- Fall (August 20\_\_)
- Winter (for Disaster Medicine and Management only)

- Summer I (May 20\_\_)
- Summer II (July 20\_\_)

I will be a  part-time student  full-time student

I am applying as a  degree candidate  non-degree candidate  CPE Audit Option

Have you ever applied for graduate admission to the University?  Yes  No If yes, when?\_\_\_\_\_

Have you ever been convicted of a felony, crime, dishonesty or any other incident involving the threat of violence? [Affirmative responses to these questions do not automatically disqualify you from admission]

No  Yes (If “Yes,” please explain on a separate piece of paper.)

**Educational Information**

List in reverse chronological order **all** colleges and universities attended for undergraduate and graduate study. Failure to disclose attendance at an institution at the time of application may cause denial of application for admission.

College/University Name & Location	Dates Attended	Degrees or Credits Earned

Undergraduate Major \_\_\_\_\_ GPA \_\_\_\_\_

If you have earned a prior Master’s Degree or are a C.P.A., the standardized test requirement is waived.

Prior Master’s Degree?  Yes  No Are you a C.P.A.  Yes  No

When did you/will you take the  GMAT  GRE  MAT (Date of Test) \_\_\_\_\_ Score

When did you/will you take the TOEFL (International Students Only) \_\_\_\_\_ Score

### Employment Information

---

List your employment history beginning with your present position. (You may attach a C.V.) **Midwifery Applicants:** *On a separate piece of paper, please also list all of your professional licenses and certification credentials. Include type, license number and the state/organization of issuance.*

Employer	Address	Position	Dates

Have you ever received disciplinary sanctions from a state licensing board including probation, suspension or revocation of license? [Affirmative responses to these questions do not automatically disqualify you from admission]

No  Yes (If "Yes," please explain on a separate piece of paper.)

Which career field best describes your current position?

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Architecture          | <input type="checkbox"/> Education                 | <input type="checkbox"/> Midwifery            |
| <input type="checkbox"/> Business              | <input type="checkbox"/> Engineering               | <input type="checkbox"/> Occupational Therapy |
| <input type="checkbox"/> Communications        | <input type="checkbox"/> Gov't & Non-Profit Admin. | <input type="checkbox"/> Textiles             |
| <input type="checkbox"/> Design                | <input type="checkbox"/> Manufacturing Operations  | <input type="checkbox"/> Science/Technology   |
| <input type="checkbox"/> Computer/Info Science | <input type="checkbox"/> Health-Related Functions  | <input type="checkbox"/> Other                |

\_\_\_\_\_

Do you have tuition remission at work?  Full  Part  None

### Additional Information

---

How did you first learn about the graduate programs at the University?

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Mail                     | <input type="checkbox"/> PhilaU Website   | <input type="checkbox"/> Fair _____               |
| <input type="checkbox"/> Live in Area             | <input type="checkbox"/> Friend/Relative  | <input type="checkbox"/> PhilaU Admissions Office |
| <input type="checkbox"/> Alumni                   | <input type="checkbox"/> Placement Office | <input type="checkbox"/> School Guides _____      |
| <input type="checkbox"/> Employer                 | <input type="checkbox"/> Radio _____      | <input type="checkbox"/> Other _____              |
| <input type="checkbox"/> Newspaper/Magazine _____ |   | <input type="checkbox"/> Web Search _____         |

**Please Note:** Some programs may require additional information. Please refer to the program description to find specific admission requirements for your program.

**Applicant's signature** \_\_\_\_\_ **Date** \_\_\_\_\_

*My signature above indicates that the information contained in this application is complete and accurate.*

Philadelphia University is an Affirmative Action, Equal Opportunity Institution.

# Recommendation Form for Graduate Admissions

4201 Henry Avenue  
 Philadelphia, PA 19144-5497  
 Office of Graduate Admissions  
 215.951.2943

## To be completed by Applicant:

Semester:    Spring 20\_\_     Summer 20\_\_     Fall 20\_\_     Winter 20\_\_ (Disaster Medicine & Management only)

<b>Program of Study:</b>	
COLLEGE OF ARCHITECTURE AND THE BUILT ENVIRONMENT	KANBAR COLLEGE OF DESIGN, ENGINEERING AND COMMERCE
<input type="radio"/> M.S. in Construction Management	<input type="radio"/> Accelerated Evening M.B.A.
<input type="radio"/> M.S. in Interior Architecture	<input type="radio"/> One-Year Day M.B.A.
<input type="radio"/> M.S. in Sustainable Design	<input type="radio"/> Strategic Design Executive M.B.A.
	<input type="radio"/> M.S. in Fashion Apparel Studies
COLLEGE OF SCIENCE, HEALTH AND THE LIBERAL ARTS	<input type="radio"/> M.S. in Industrial Design
<input type="radio"/> M.S. in Disaster Medicine and Management	<input type="radio"/> M.S. in Interactive Design and Media
<input type="radio"/> M.S. in Midwifery**	<input type="radio"/> M.S. in Taxation
<input type="radio"/> M.S. in Occupational Therapy	<input type="radio"/> M.S. in Textile Design, circle one: Print   Weave   Knit
<input type="radio"/> M.S. in Physician Assistant Studies	<input type="radio"/> M.S. in Textile Engineering
	<input type="radio"/> Ph.D. in Textile Engineering

— Midwifery requires the submission of a specific recommendation form in lieu of this form- the Midwifery Recommendation Form is available for download at [www.philau.edu/midwifery](http://www.philau.edu/midwifery)

Name: \_\_\_\_\_ Social Security Number: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_

The Family Educational Rights and Privacy Act of 1974 and its amendments guarantee students access to their educational records. Students may waive their right of access to recommendations. The choice of the applicant regarding this recommendation is indicated below.

I do waive     I do not waive my right to inspect the following recommendation.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**To the recommender:**

---

The person whose name appears above has applied to the graduate studies program at Philadelphia University. Your appraisal of the applicant's academic ability, character and likelihood of success in the program will help us in making an admission decision. Please complete and return this form at your earliest convenience. **(If you wish to add additional comments, please do so on the reverse side of the page.)**

1. How long have you known the applicant and in what relationship? From \_\_\_\_\_ To \_\_\_\_\_

2. Please give us your appraisal of the applicant in terms of the qualities listed below.

Qualifications	Excellent No basis for judgment	Above Average	Average	Below Average
Written skills	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intellectual ability	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership ability	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analytical ability	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to work with others	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Originality and creativity	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Initiative and perseverance	<input type="radio"/> <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. I  Recommend without reservation  recommend  do not recommend this applicant to be admitted to the graduate studies program.

4. Recommender's signature \_\_\_\_\_ Date \_\_\_\_\_

Recommender's name \_\_\_\_\_ Employer \_\_\_\_\_ Position \_\_\_\_\_

Home address \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Email \_\_\_\_\_

**Please return to:** Director of Graduate Admissions, Philadelphia University, 4201 Henry Avenue, Philadelphia, PA 19144-5497. Telephone: 215.951.2943

Philadelphia University is an Affirmative Action, Equal Opportunity Institution.

# Application for Graduate Assistantship

4201 Henry Avenue  
 Philadelphia, PA 19144-5497  
 Office of Graduate Admissions  
 215.951.2943

To be considered for a graduate assistantship, an individual must submit an Application for Admission, with official transcripts and test scores, prior to or along with an application for Graduate Assistantship. Please type or print all information.

<b>Program of Study:</b>	
COLLEGE OF ARCHITECTURE AND THE BUILT ENVIRONMENT	KANBAR COLLEGE OF DESIGN, ENGINEERING AND COMMERCE
<input type="radio"/> M.S. in Construction Management	<input type="radio"/> Accelerated Evening M.B.A.
<input type="radio"/> M.S. in Interior Architecture	<input type="radio"/> One-Year Day M.B.A.
<input type="radio"/> M.S. in Sustainable Design	<input type="radio"/> Strategic Design Executive M.B.A.
	<input type="radio"/> M.S. in Fashion Apparel Studies
COLLEGE OF SCIENCE, HEALTH AND THE LIBERAL ARTS	<input type="radio"/> M.S. in Industrial Design
<input type="radio"/> M.S. in Disaster Medicine and Management	<input type="radio"/> M.S. in Interactive Design and Media
<input type="radio"/> M.S. in Midwifery**	<input type="radio"/> M.S. in Taxation
<input type="radio"/> M.S. in Occupational Therapy	<input type="radio"/> M.S. in Textile Design, circle one: Print Weave Knit
<input type="radio"/> M.S. in Physician Assistant Studies	<input type="radio"/> M.S. in Textile Engineering
	<input type="radio"/> Ph.D. in Textile Engineering

Name: \_\_\_\_\_

Social Security Number: \_\_\_\_\_  Male  Female

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ (\_\_\_\_) \_\_\_\_\_

**Graduate Program of Interest:** (Note: Students in the Physician Assistant Studies and Strategic Design Executive M.B.A. programs are not eligible for graduate assistantships)

Entry Semester:  Fall (August 20\_\_\_\_)  Spring (January 20\_\_\_\_)

**Educational Information:**

College	Year graduated GPA	Degree earned	Major
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Test Results (please indicate the highest score received on the following tests)

Score

Test Date

GMAT:

GRE:

MAT:

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Please attach a letter that indicates what skills/experience you have which would be useful in a graduate assistantship, a current resume, a copy of standardized test scores and two recommendations along with this application. Return completed Application for Graduate Assistantship to the Office of Graduate Admissions.

# International Student Agreement Form

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4201 Henry Avenue  
Philadelphia, PA 19144-5497  
Office of Graduate Admissions  
215.951.2943

## Required information for an F-1 Student Visa:

1. In what country were you born? \_\_\_\_\_
2. Of what country are you a citizen? \_\_\_\_\_
3. Of what country are you a permanent resident? \_\_\_\_\_
4. Your date of birth \_\_\_\_\_
5. Permanent home address \_\_\_\_\_

## If I am admitted as a student to Philadelphia University:

1. I understand I must attend Philadelphia University for a minimum of one full semester (nine graduate credits) if I travel to the United States on an F-1 visa granted through a SEVIS I-20 issued by Philadelphia University.
2. I will enroll in the required courses as determined by the graduate studies advisor for international students.
3. I will enroll in and attend at least nine credits of classes each semester.
4. I will not add or drop courses without the approval of the graduate studies advisor for international students.
5. I will accept employment only when approved by Philadelphia University and when authorized in writing by the United States Bureau of Citizenship and Immigration Services.
6. I agree to take an English language placement test before registering for any classes.
7. If necessary, I will enroll in any classes suggested by the University to improve my English ability.

I understand that if I fail to meet the above conditions or if I fail to maintain at least a "B" scholastic average, Philadelphia University will immediately notify the United States Bureau of Citizenship and Immigration Services that my approval has been cancelled and that I will not be permitted to continue my studies at Philadelphia University. Having read and understood all of the above, I agree without qualification to these conditions.

Student's Name (as it appears on passport): \_\_\_\_\_

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Please return this form to:

Office of Graduate Admissions  
Philadelphia University  
4201 Henry Avenue  
Philadelphia, PA 19144-5497 USA

# International Student Transfer Recommendation Form

For students currently studying in U.S.

4201 Henry Avenue  
Philadelphia, PA 19144-5497  
Office of Graduate Admissions  
215.951.2943

Please submit this form to the international student advisor of the institution you currently attend or most recently attended.

Name: \_\_\_\_\_

Admission (I-94 card number) \_\_\_\_\_ Student ID # \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I grant permission for the information requested below to be released to Philadelphia University.

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## To be completed by the designated school official

The above named student has applied for admission to Philadelphia University. We request confirmation of his/her status before completing a transfer.

Current immigration status:  F-1  J-1  Other  I-94 card expiration date \_\_\_\_\_

Degree level being pursued at your institution \_\_\_\_\_

Date of last attendance at your school \_\_\_\_\_

Has the student been maintaining full-time status at your institution?  Yes  No

To the best of your knowledge, is the student currently in status?  Yes  No

Date student will be released from SEVIS \_\_\_\_\_

Please indicate the dates of any practical training in which the student has participated:

Curricular \_\_\_\_\_ Optional \_\_\_\_\_ J-1 Academic \_\_\_\_\_

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and title of DSO completing this form: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of institution: \_\_\_\_\_



Address: \_\_\_\_\_

Telephone number: (\_\_\_\_) \_\_\_\_\_ Email address: \_\_\_\_\_

**Please return completed form to:**

Office of Graduate Admissions

Philadelphia University

4201 Henry Avenue

Philadelphia, PA 19144-5497 USA

# Statement of Financial Support

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4201 Henry Avenue  
 Philadelphia, PA 19144-5497  
 Office of Graduate Admissions  
 215.951.2943

Student's Name \_\_\_\_\_

Sponsor's Name \_\_\_\_\_

Sponsor's Address \_\_\_\_\_

\_\_\_\_\_

Sponsor's Occupation \_\_\_\_\_ Annual Salary \$US \_\_\_\_\_

Relationship to Applicant \_\_\_\_\_

**I certify that I will provide financial support for** \_\_\_\_\_

**who resides at** \_\_\_\_\_

\_\_\_\_\_

**to come to the United States and study at Philadelphia University. I am willing and able to maintain and support the prospective student. I am ready and willing to deposit a bond, if necessary, to guarantee that such prospective student will not become a public charge during his/her stay in the United States. I also assure the University that the prospective student whom I am willing to support will not find it necessary to appeal to Philadelphia University for scholarship or other material aid.**

***\*It is only necessary to show one year of financial support.***

	*1st Year	2nd Year
Total available from sponsor in US \$.		
Total \$ available from parent (if not sponsor) in \$ US.		
Available from scholarships/sponsoring organizations.		
TOTAL available from all sources.		

Signature of the sponsor \_\_\_\_\_

Sworn to and subscribed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

Signature of Notary \_\_\_\_\_

**NOTE: Attach official Bank Statements and Documentation**

\_\_\_\_\_

## The Midwifery Institute of Philadelphia University Clinical Site

The Midwifery Institute requires that students obtain their own clinical sites. After you have confirmed your clinical site, please notify us so that we may send an interview form and accompanying information to the potential preceptor.

**Important: if you intend to use multiple sites, please list them below.**

Applicant Name \_\_\_\_\_

Primary Preceptor Name: \_\_\_\_\_

Site Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax (if known): \_\_\_\_\_

After the interview, insure that the site sends the completed interview forms directly to the Admissions Coordinator at the Institute.

The Midwifery Institute maintains a Quality Assurance Program that includes the verification of credentials of potential preceptors. In order for a student to begin clinical in a site, a number of requirements must be met by the preceptors, and an affiliation agreement between the clinical agency and the Institute signed. Once the student is accepted into the program, the process is initiated. In the unlikely event that the Institute is unable to sign an affiliation agreement with a clinical agency, the student may be asked to undertake clinical in an alternative site.

Primary Preceptor Name: \_\_\_\_\_

Site Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax (if known): \_\_\_\_\_

Primary Preceptor Name: \_\_\_\_\_

Site Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax (if known): \_\_\_\_\_

# Master's in Midwifery Recommendation Form

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## The Midwifery Institute of Philadelphia University

222 Hayward Hall

4201 Henry Avenue, Philadelphia, PA 19144

Telephone: 215.951.2525 FAX 215.951.2526

### To be completed by Applicant:

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Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The Family Educational Rights and Privacy Act of 1974 and its amendments guarantee students access to their educational records. Applicants may waive their right of access to recommendations. Failure to sign this form constitutes a waiver of the applicant's right to review this recommendation.

I hereby voluntarily waive my right of access to any information contained in this recommendation form and agree that the information contained in the form should remain confidential.

I do not waive my right of access to any information contained in this recommendation form.

Applicant: Signature \_\_\_\_\_ Date \_\_\_\_\_

### Evaluator

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Please answer the questions listed below according to your knowledge of the applicant. Thank you for your assistance.

1. How long have you known the applicant? \_\_\_\_\_

2. What is your relationship with the applicant? \_\_\_\_\_

Place a rating number for each question, followed by a brief comment on the applicant's strengths and weakness in the following areas.

**4 = Outstanding**      **3 = Above Average**      **2 = Average**      **1 = Below Average**      **0 = No basis for judgment**

3. Academic or intellectual ability: ( ) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Verbal communication skills: ( ) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Written communication skills: ( ) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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6. Ability to accept and utilize constructive criticism: ( ) \_\_\_\_\_

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7. Motivation and/perseverance: ( ) \_\_\_\_\_

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8. Interactions with clients and/or patients: ( ) \_\_\_\_\_

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9. Empathy: ( ) \_\_\_\_\_

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10. Emotional stability/maturity: ( ) \_\_\_\_\_

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11. Problem solving skills/critical thinking: ( ) \_\_\_\_\_

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12. Ability to get along and work with others: ( ) \_\_\_\_\_

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13. Integrity: ( ) \_\_\_\_\_

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14. Accountability:( ) \_\_\_\_\_

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15. Leadership: ( ) \_\_\_\_\_

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16. Additional comments: \_\_\_\_\_

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17. May we contact you for additional information?  Yes  No

18. Overall recommendation (please check one):

This applicant has my highest recommendation

- I recommend this applicant highly, without reservation
- I recommend this applicant
- I recommend this applicant, with some reservations
- I do not recommend this applicant

Name \_\_\_\_\_ Title \_\_\_\_\_ Agency \_\_\_\_\_

Address \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Email \_\_\_\_\_

Signature of Evaluator: \_\_\_\_\_ Date \_\_\_\_\_

**Please Note:** Place this in a sealed envelope, with your signature across the flap, and return to Graduate Admissions, Philadelphia University, 4201 Henry Avenue, Philadelphia, PA 19144-5497. Telephone: 215.951.2943

Philadelphia University is an Affirmative Action, Equal Opportunity Institution.

## University Academic Policies and Procedures

The following are policies and procedures for the students pursuing coursework in the undergraduate, graduate, continuing and professional studies and non-degree programs of the University. This section is divided into three sections:

1. **“Common Academic Policies and Procedures for All Students,”** with policies and procedures common to all academic levels;
2. **“Undergraduate Student Academic Policies and Procedures,”** unique to undergraduates and
3. **“Graduate Student Academic Policies and Procedures,”** unique to graduate students.

### 1. Common Academic Policies for All Students - Undergraduate, Graduate, Continuing and Professional Studies and Non-degree Students.

The following are common policies and procedures for the students pursuing coursework in the undergraduate, graduate, continuing and professional studies and non-degree programs of the University.

*Topics are organized in alphabetical order.*

#### ABSENCES FOR MEDICAL REASONS

Any student who is unable to attend classes for three consecutive days or more due to illness or injury should alert the Dean of Students Office. Notifications by the Dean of Students Office will be sent to each professor of the student currently not able to attend classes due to medical reasons. Philadelphia University Health Services does not provide “sick notes” for students to professors for brief absences from class due to illness. We encourage students to communicate directly with their professors about their absences. This is meant to encourage mature communication between student and professor, as well as encourage personal responsibility for class attendance decisions.

**Absences due to illness do not supersede the specific attendance policy for an instructor. Students are required to contact their professors about their academic standing in class either during or immediately following the medical problems. The determination of a student’s academic standing in class is completely within the discretion of the individual instructor.**

If a student is diagnosed with a communicable illness that poses a possible threat to the University community, a general notification may be sent to those at risk for exposure to the illness per the recommendation of the Philadelphia Health Department. Efforts will be made not to disclose the infected student’s name. The University cannot assume responsibility for deductions and assumptions made by others, but will make every effort to anticipate and address any concerns.

Students who are diagnosed with a communicable disease and those not immunized against an offending vaccine-preventable disease may be required to leave campus until their illness is resolved. For information, contact the Student Health Center at 215.951.2986.

## ACADEMIC INTEGRITY

In order to articulate fully its commitment to academic honesty and to protect members of its community (faculty, students and staff) from the results of dishonest conduct, Philadelphia University has adopted policies to address cases of academic dishonesty. These policies are intended not only to emphasize the imperative of academic integrity, but also to protect the rights of all members of the University community.

### (1) Types of Academic Dishonesty

The following incidences provide examples of the most common types of academic dishonesty, but other instances may occur outside of the definitions defined here.

#### (a) Cheating

Cheating is the inappropriate and unacknowledged use of materials, information, designs, ideas or study aids in any academic exercise. The use of books, notes, calculators and conversations with others is restricted or forbidden in certain circumstances. Cheating also includes stealing, buying or otherwise obtaining a test; selling or giving away answers to a test; buying or selling a paper, painting, sculpture, model, project or design for use in the fulfillment of an academic requirement; or falsifying a grade or attempting to change a grade on a test, official academic record or a change-of-grade form. Students may not request others (including commercial term-paper companies) to conduct research or prepare any work for them. Students are also not permitted to submit identical work or portions of that work for credit or honors more than once without prior approval of the faculty member.

#### (b) Fabrication

Fabrication is the falsification or invention of any information or citation in an academic work. "Invented" information (that is, information which is made up by the student) may not be used in any laboratory experiment or other academic exercise. The student must always acknowledge any source from which cited information was obtained. A writer should not, for example, reproduce a quotation from a book review and indicate that the quotation was obtained from the book itself.

#### (c) Plagiarism

Plagiarism is the representation of the words or ideas of another as one's own in any academic exercise. To avoid plagiarism, every idea or argument that is not one's own must be cited. Only information considered to be "common knowledge" does not need to be cited (when unclear about the definition of "common knowledge" in a particular discipline, students should consult with the faculty member teaching the course). Paraphrased material taken from print, electronic sources or other media should also be cited. Along with this citation, the author should acknowledge a paraphrase properly, by using words such as: "to paraphrase Smith's comment, "or "drawing on Smith's ideas about." Every direct quotation must be identified by quotation marks or appropriate indentation and must be properly cited according to correct citation conventions. Students must familiarize themselves with the correct citation conventions required in each course. Any questions about what constitutes plagiarism should be discussed with the faculty member. Faculty members may suggest a style guide to use; style guidelines are also available on the Philadelphia University's Learning and Advising Center website ([www.PhilaU.edu/learning](http://www.PhilaU.edu/learning)).



(d) **Facilitating Academic Dishonesty**

Students who knowingly or negligently allow their work to be used by other students or who otherwise aid others in academic dishonesty are violating academic integrity.

(e) **Denying Others Access to Information or Material**

It is a violation of academic integrity to deny others access to scholarly resources, or to deliberately impede the progress of another student. Examples of offenses of this type include giving other students false or misleading information; making library material unavailable to others by stealing or defacing books or journals or by deliberately misplacing or destroying reserve materials; or altering computer files that belong to another.

**(2) Process for Handling Academic Dishonesty**

If a faculty member has reason to believe a student has violated the academic-integrity policy, the following should ensue:

- (a) The faculty member will discuss the situation with the student and will determine appropriate action within the faculty member's purview as a member of the teaching faculty;
- (b) The faculty member then reports the behavior and the sanction to the School/College/Division Dean who refers the matter to the Dean of Students and it becomes a permanent part of the student's confidential judicial record;
- (c) The faculty member will work in conjunction with the Dean of Students to refer the case to the Student Conduct Committee in cases where the offense merits the attention of the Student Conduct Committee. The Student Conduct Committee is a group of faculty and students empowered to make judicial decisions on behalf of the University.

**(3) Sanctions**

It is up to the faculty member to determine how serious the offense is (based upon her/his academic standards and expectations) and the sanctions to be imposed. Both the College/School/Division Dean and the Dean of Students will be kept apprised of all actions. The Student Conduct Committee may wish to follow these guidelines as well.

If it is judged that a student has violated the University's standards for academic integrity, these sanctions might apply:

- (a) Repeat the assignment or complete another assignment;
- (b) A warning or verbal reprimand with a written description of the interaction by the faculty member. Copies will be kept by the faculty member, as well as by the Dean of Students;
- (c) Failure of the assignment with no opportunity to repeat it. No points will be earned for the assignment (that is, an F will equal a "0");
- (d) Failure of the class;
- (e) Referral to the Student Conduct Committee for possible suspension or expulsion.

**(4) Appeals Procedure**

Students who wish to appeal a faculty member's sanction(s) should follow the procedure as outlined in the University catalog and the Student Handbook under the academic policies section "Appeal of Adverse Decisions."

Sources: Rutgers University Policy on Academic Integrity for Undergraduate and Graduate Students, New Brunswick, <http://teachx.rutgers.edu/integrity/policy.html> and Drexel University's policy, [www.drexel.edu/studentlife/studenthandbook/honesty10.htm](http://www.drexel.edu/studentlife/studenthandbook/honesty10.htm). Both policies are used by permission.

## **ADDRESS OR NAME CHANGES**

It is the student's responsibility to see that a valid permanent address and current name is on file in the Office of the University Registrar. Any change of name or permanent or local address must be reported to the Office of the University Registrar when it occurs. Students may also change their address on web advisor. A forwarding address should also be given to the U.S. Postal Service.

International students must also contact the director of International Student Programs when changing their name or address.

## **APPEAL OF ADVERSE DECISIONS**

Students have the right to appeal decisions that are made regarding them by any faculty, official or committee of the University. The Dean of Students and the Learning and Advising Center can advise students on the appeals process.

Students should first discuss the decision with the individual who made the adverse decision. If a satisfactory resolution of the problem cannot be reached at that level, students may file a subsequent appeal with the dean or the person to whom that faculty or staff member reports. In the event a satisfactory resolution cannot be reached at that level, or if there were no intermediary, an appeal may be submitted to the Executive Dean of the College. The Executive Dean is the final appeal.

In the event a University committee rendered a decision, the student may file a second appeal with that same committee if there is new information that would have a bearing on the outcome of the case. The University committee is the final appeal.

## **ATTENDANCE**

All students are responsible for, and grades may be determined by, all requirements outlined by the instructor's syllabus. This may include class attendance and participation, as well as the completion of all assignments, the reading of all required materials, the completion of laboratory assignments and/or field trips and the taking of the required examinations.

Any students with absences due to extended illness should contact the Dean of Students office. This will not, however, override an instructor's attendance policy. Students are required to speak with their instructor about all extended absences to learn of their academic standing in the class. Students with excessive absences due to personal circumstances should contact the Dean of Students and are encouraged to contact the Counseling Center.

## **CANCELLATION OF CLASSES**

Cancellation is automatic upon failure of the instructor to appear 15 minutes after the normal starting time of that class, unless notice is sent prior to that time that the instructor will be late. In the event of inclement winter weather, a notice will be posted on [www.PhilaU.edu](http://www.PhilaU.edu), the University will email an announcement to the students and KYW 1060AM will make an announcement of the snow number.

The number for cancellation of classes:

Day 112

Evening (announced after 3 p.m.)

Main Campus 2230

Bucks County Campus 2751

## **CHALLENGE EXAMINATIONS**

Students who desire credit for courses taken at non-accredited institutions, for industrial/work experience or for other appropriate life experience may arrange for a challenge examination. If the subject is not covered by the national testing agencies (see National Testing Agencies), a student may receive credit for courses offered by the University by making arrangements for an examination to be

given by the college offering the course. Satisfactory evidence of adequate and appropriate preparation must be presented before the examination is prepared. If it appears that the student has adequate preparation, the student pays a fee, presents the receipt to the college manager of academic operations and takes an examination. The college will send the Office of the University Registrar the receipt for the examination fee along with written notification of a passing grade for the examination. Only one examination will be allowed for any one course. Students are ineligible for a challenge examination if they have previously enrolled in the same course at Philadelphia University. See “Financial Information.”

### **CHANGING CATALOG YEAR**

In connection with changes in University curricula, there may be rare occasions in which students are requested to change their catalog year to gain the learning advantages offered by the new curricula. Changes in Catalog Year are only progressive, meaning that catalog year changes may only advance to the latest or most recent year’s curricula. No students or programs may request that a catalog year be changed regressively, i.e. moving back to the curricula of previous year or years.

### **COMPLIANCE WITH UNIVERSITY REGULATIONS**

By accepting registration, students agree to accept responsibility for compliance with academic requirements and conduct regulations.

It is recognized that, once registered, students have basic rights, but the University reserves the right to require students to withdraw at any time if they fail to live up to their responsibilities to maintain the standards of conduct and scholarship.

Due-process procedures will be followed in all violations that could result in the dismissal of a student from the University.

### **COMPUTER RESOURCES**

The Office of Information Resources (OIR) is responsible for management, operation, security and support of the information-technology environment at Philadelphia University. In accordance with established policies, all members of the Philadelphia University community are responsible for effective, efficient, ethical and acceptable use of information resources. The complete text of the University’s “Information Technology Policy” is published in the University’s *Student Handbook* and is available online at [www.PhilaU.edu/studenthandbook](http://www.PhilaU.edu/studenthandbook).

### **CONDUCT**

The University tries to minimize the number of specific regulations governing conduct, assuming that students are adults and mature enough to establish a code of conduct that will reflect well on themselves and the University. The University expects students to perform their work honestly, pay debts promptly, comply with public laws and respect the property of the University, the community and fellow students.

All individuals and organizations affiliated with the University or using the name of the University are expected to conduct their affairs in a manner reflecting credit on the University.

The University does have regulations governing certain types of conduct. These are stated in detail in the *Student Handbook*, which is available online at [www.PhilaU.edu/studenthandbook](http://www.PhilaU.edu/studenthandbook).

A Student Conduct Committee reviews serious cases involving violations of conduct standards and regulations, including academic dishonesty. The operation of this committee is outlined in the *Student Handbook*.

### **COURSE-BY-APPOINTMENT (CBA)**

The intended course-by-appointment must currently exist in the University catalog, i.e. course number and course name already have been created by the Registrar. All prerequisites for the existing course must have been met prior to the CBA.

A written proposal detailing how the existing syllabus will be modified to allow equivalent classroom experiences during the term must be attached to the required approval form. This form is obtained online at the University Registrar's website <<http://www.philau.edu/registrar>> and, if approved, the student must submit the form to the Registrar before the "last day to add" deadline (see Academic Calendar). Further details are provided on the form.

Students may also be permitted to take CBA for an existing catalog course that anticipates low enrollment. In such cases the University Registrar lists such courses on the master schedule without indicating days or times. The assigned faculty member subsequently contacts all students who register, and a mutually convenient day and time is established. The completed form, with the required signatures, will be submitted to the manager of academic operations of the college in which the course is given, or the School of Continuing and Professional Studies if appropriate, and must be presented to the Registrar before the "last day to add" deadline.

The University reserves the right to identify courses that may not be taken by appointment regardless of scheduling conflict or anticipated date of graduation.  
See "Independent Study."

### **DISABILITY SERVICES**

The Office of Disabilities Services provides, on an individual basis, reasonable accommodations to students with hearing and visual impairments, mobility impairments, learning disabilities and attention deficit disorders, chronic illnesses and psychological impairments that may affect their ability to fully participate in program or course activities or to meet course or curricular requirements. This office functions to determine qualified disability status and to assist students in obtaining appropriate and reasonable accommodations and services. Accommodations may include, but are not limited to, testing or classroom adjustments, tutoring and use of adaptive equipment. Services provided are designed to encourage independence and self-advocacy, backed by a comprehensive system of supports.

Students should contact the Office of Disabilities Services for additional information, guidelines and procedures.

### **DROPPING COURSES**

Schedule changes, such as adding a course, changing a section, replacing a course or section, etc., must be made by the "last day to add" in the Academic Calendar. See Academic Calendar online.

Undergraduate first year students need to submit a "course withdrawal/course registration form" to the Registrar's Office in order to make any changes to their semester schedules. This includes changes to add, drop or withdraw from a course.

Students may drop a course with no notation on the transcript if the drop is completed before "last day to drop without 'W' grade" deadline on the Academic Calendar.

After the "last day to drop without W grade," a student may withdraw from a course prior to or on the "last day to withdraw from a course" (see Academic Calendar). When a student withdraws from a course, a "W" will appear on the transcript for that course and this will affect Academic Standing. To withdraw from a course, all students must submit a signed Course Withdrawal form to the University Registrar or the School of Continuing and Professional Studies. Forms may be found online at the Registrar's website: <http://www.philau.edu/registrar/>

If the student officially withdraws after the "last day to withdraw from a course," a WF will appear in the transcript and affect the GPA calculations and Academic Standing. If the student fails to officially withdraw from a course before the "last day to withdraw from a course," a grade of "F" will appear on their transcript and affect the GPA calculations and Academic Standing.

Specific deadlines for dropping special accelerated courses or summer session courses are published by the University Registrar. These deadlines will determine the drop period for summer and all Continuing and Professional Studies sessions.

In exceptional cases a student may request special permission from the Director of the Learning and Advising Center to drop a course after the “last day to withdraw from a course” deadline. In such cases a grade of “W” will appear on the transcript for that course and this will affect Academic Standing.

Students may not drop or withdraw from fundamentals courses.

*See “Schedule Changes,” and “Leave of Absence/Withdrawal Policy” and “Refund Policy.”*

## **FINAL EXAMINATIONS**

Final examinations are scheduled during a one-week period at the end of each semester. Examination periods are two hours in length.

The University has a policy prohibiting the administration of any final examinations during the last “instructional” week of the semester, in place of an examination during the scheduled final exam week.

No student is required to take more than three final examinations during a given day. If, because of this policy, it is necessary for a student to have any examinations rescheduled, arrangements must be made with the University Registrar no later than a week in advance of the start of exam week.

## **GRADE CHANGES**

All grades become part of the permanent records of the University at the end of the semester. Following this, no grades may be changed without the written approval of the faculty and associate dean of the college offering the course. Forms for change of grades may be found online on the University Registrar’s website, [www.PhilaU.edu/registrar/](http://www.PhilaU.edu/registrar/).

This in no way affects the institutional policy regarding the grade of “Incomplete.”

## **GRADE REPORTS**

Current students can access and print their grade reports using Web Advisor. Grade reports are not mailed to students.

## **GRADUATION APPLICATION PROCEDURES**

Students nearing graduation must review graduation requirements with their advisor or their program’s graduation certification officer at least two semesters before they plan to graduate. Students then must apply on line for graduation and they submit a preliminary certification form to the Office of the University Registrar. Deadlines are April 15 for a candidate for August or December graduation, and October 15 for a candidate for May graduation. An August graduate may seek permission to walk at the May Commencement event. Instructions can be found on the Registrar’s page on the web: [www.philau.edu/registrar](http://www.philau.edu/registrar)

## **HUMAN SUBJECTS POLICY**

Faculty, staff and students at Philadelphia University are occasionally involved in the conduct of research involving human subjects. Any research conducted under the auspices of Philadelphia University must protect the rights of human subjects and requires approval from the University’s Institutional Review Board (IRB). An IRB is a committee of peers that examines human subjects research proposed by Philadelphia University faculty or students for ethical concerns and determines: 1) the rights and welfare of the individual or individuals involved; 2) the appropriateness of the methods used to secure informed consent; and 3) the risks and benefits of the investigation. The IRB approves, denies or recommends changes to the proposed research to assure the protection of the rights of human subjects.

The policies and procedures associated with the review and approval of research involving human subjects at Philadelphia University are established to be consistent with current federal guidelines. The complete text of the “Human Subjects Policy” is published in the University’s Student Handbook.

### **INDEPENDENT STUDY (IS)**

Students may earn credit through a supervised learning experience in which the student plays a significant part in determining the learning objectives and anticipated outcomes. IS provides students a unique opportunity to work closely with a faculty mentor, while studying a subject of their own choice. This learning experience, however, should not duplicate material delivered within an existing course catalog. Only students who are prepared to devote considerable time and effort should undertake IS. Planning of the scope and structure of this learning experience should begin in the semester preceding enrollment, not during the term of the IS.

Before registering for the IS, students must secure the written approval of a faculty member who has agreed to supervise the work. Approval of IS can be expected if the faculty member has the time and the interest to supervise the student’s work and if the supervisor and the student can agree in advance on a suitable subject for independent study. Faculty members may choose which applicants they wish to supervise. The decision will be determined by time available, by their professional interests and by their estimate of an applicant’s prospects for doing suitable work.

Students plan specific activities and goals with the help of the cooperating faculty member. They must then receive approval for their plans and complete the Independent Study agreement form, available online at the Registrar’s website, [www.philau.edu/registrar](http://www.philau.edu/registrar). The student is responsible for bringing the completed and signed form to the University Registrar for official enrollment purposes.

#### **Requirements for an Independent Study**

*(additional requirements may exist for each college)*

- A student must have completed 15 credits in residence with a minimum grade point average of 2.50 prior to enrolling in independent study. (Undergraduate).
- Registration must be completed before the “last day to add” deadline in the current Academic Calendar (see Academic Calendar).
- A student may select no more than one course by independent study during a single term.
- A maximum of four courses may be taken by independent study in a degree program.
- A student may not select more than two IS courses under the sponsorship of the same faculty member.
- At the end of the term, students are required to present their work to faculty and student representatives of the University.

See “Course by Appointment.”

### **INFORMATION LITERACY**

**Mission:** To help students become “wise information consumers” and lifelong learners, by developing in them the abilities to effectively find, evaluate and apply information.

Information literacy is embedded in the curricula of each college. Students are exposed to information literacy concepts in the context of both their major and College Studies courses. Students learn how to use the information resources and technologies relevant to their lives as scholars on campus and as professionals in the field. Throughout their undergraduate careers, students gain practical experience in the critical application of data and information to various information needs and problems.

The 21st-century workplace recognizes the value of information-literate employees. Today’s technology and knowledge-driven economy demands highly-skilled workers who are adaptable, resourceful, intrinsically motivated and able to learn. Through the University’s efforts to create information-literate

graduates, students engage in the same process of information problem solving that will continue for the rest of their lives.

Information Literacy at **Philadelphia University** is a collaborative, campus-wide effort involving classroom faculty, librarians, the University Writing Program, technology and computing support, and University administrators. **Faculty, administrators, and librarians work together to incorporate Information Literacy into programs, courses and assignments, and to assess stated Information Literacy Learning Outcomes. Librarians also support students, faculty, and staff as they seek to become information literate, lifelong learners**

*For more information see “Information Literacy” in Academic Programs section of the Academic Catalog.*

## **INTERNATIONAL STUDENTS**

International students should consult with the director of International Student Programs concerning specific policies applicable to them. The director of International Student Programs offers assistance to these students in many areas, such as providing orientation assistance, academic advising assistance, referral to language classes as a result of placement testing and administrative liaison with governmental agencies.

All international students, including transfer students, must report to the International Student Programs office, located in the Kanbar Student Center, to certify their registration and to provide a local address. The office is open on a walk-in basis and by appointment.

## **LEAVE OF ABSENCE POLICY**

A leave of absence is a leave from the University with the intention of returning within two full academic semesters or a calendar year to complete coursework.

The deadline to take a leave of absence from the University without any record of courses or grades of the current semester is the same as the “last day to drop without a W grade.” – See Academic Calendar.

If a student takes a leave of absence from the University before the “last day to withdraw from a course,” all LOA grades will be a “W” and will affect Academic Standing. If a student takes a leave of absence after the “last day to withdraw from a course” all LOA grades will be a “WF” and will affect the G.P.A. calculations and Academic Standing.

When a student takes a leave of absence during a semester, the effective date of the leave of absence will be determined when the Office of the University Registrar receives the completed leave of absence form (see University Registrar’s website for appropriate form). Students must check with the Students Accounts Office to determine their financial responsibility for tuition and other fees, such as housing and meal plans.

Any student who is in good academic standing is eligible to take a leave of absence from the University for up to one calendar year. A leave of absence allows students to re-enter the University within one calendar year from the date on which the leave was approved without the need for completing a new application.

The leave of absence also enables the student to retain degree requirements from the catalog under which they originally matriculated. Any student may, however, choose to re-enter under requirements in the current catalog. A student whose leave of absence extends beyond two full academic semesters must complete a new application to re-enter the University. Graduation requirements will be determined from the catalog in effect on the date of acceptance for re-entry by the Office of Admissions or the School of Continuing and Professional Studies.

Students who are not in good academic standing are permitted to apply for withdrawal, but not leave of absence. Under these circumstances, the Undergraduate Academic Standards Committee must approve any application for re-entry before a student registers for any additional courses at the University. (See “Withdrawal from University”)

For information about the financial aspects of the leave of absence policy, please refer to the “Refund Policy” included in the “Financial Information” section of the catalog.

### **LEAVE OF ABSENCE – MEDICAL**

A Medical Leave of Absence is granted to students who cannot continue enrollment due to physical or mental health problems. A Medical leave remains in force for one calendar year. If the student does not return within that time frame, s/he must re-apply to the University. The procedure for acquiring a Medical Leave of Absence is as follows:

1. Complete the **Medical Leave of Absence Form** (you can obtain this form from the Registrar’s website: [www.philau.edu/registrar](http://www.philau.edu/registrar)).
2. Make an appointment with the Dean of Students Office to discuss the circumstances and implications of the Leave. This includes the impact of the leave on academic progress, student accounts, financial aid, tuition insurance claims and housing (if the student lives on campus).
3. Provide medical documentation to validate the need for the medical leave.

Students who take a medical leave before the last day to drop will not see any courses/ grades on their transcript. Those students who obtain a medical leave during the semester but prior to the last day to withdraw from classes will receive W’s on the transcript. If the withdraw date is past, the Dean of Students may authorize “late W’s” for documented medical leaves.

Students on Medical Leave must notify the Dean of Students Office 30 days prior to the beginning of the semester of their intent to return to the University. Medical documentation will be required for all students to determine if the student is healthy and ready to return to the University. Medical documentation will be on file in the Dean of Students Office.

### **NON DEGREE STATUS ENROLLMENT**

Students may apply for non-degree status and register for courses at Philadelphia University. Students with non-degree status are permitted to register for a total of 15 credits and thereafter must apply for matriculating status. Credits earned under “non-degree” status cannot be used to receive a certificate, minor, specialization/concentration or any degree without matriculating.

Contact the University Registrar’s office for more information on applying and registering as a non-degree student.

Credits earned under “non-degree” status cannot be used to receive a cert, minor, specialization/concentration, or any degree without matriculating.

#### **Registration**

Students are expected to register on the published dates for registration. Fees are payable in advance or upon the registration date. Students will receive grades for all courses for which they are registered.

### **REPEATING A COURSE**

Students who fail a required course must to repeat the same course during the next term in which it is offered, if the course is the only course that will satisfy the requirement or they wish to have the failing grade replaced in GPA on the transcript (old grade is not removed).

A student will be permitted to enroll in a course for a second time without conditions, regardless of the grade earned in the course previously.

A student who has failed a course twice will be permitted to re-enroll for a course for a third time when they present the University Registrar with written approval from their advisor.



A student who has passed a class twice with a passing grade and wishes to take it a third time for any reason, will need to complete the “Repeating a Course” form and get the appropriate signatures to be allowed to enroll for the course. Appropriate forms for approval are available online on the Registrar’s webpage, <http://www.philau.edu/registrar/>.

When a course is repeated, the original grade will remain on the transcript, but will be removed from the calculation of the grade point average. The new grade will enter into the calculation of the grade point average — even if it is lower than the grade originally earned.

Grades of “NC” or “AUDIT” will not replace a former grade in a repeated course.

A course failed at Philadelphia University may not be repeated at another institution without prior written approval. See “Permission to Take Courses at Another Institution” form on Learning and Advising website <http://www.philau.edu/learning/>.

The most recent grade earned is also the one applied to graduation requirements, even if it is lower than the original grade. Any successfully-completed course can be applied to graduation requirements only once, no matter how many times it may be taken and passed.

### **RESPONSIBILITY TO KEEP INFORMED**

Students are ultimately responsible for their own progress toward graduation; they are expected to use the catalog as a reference handbook and to familiarize themselves with the principal policies and procedures contained in it. The Catalog website ([www.PhilaU.edu/catalog](http://www.PhilaU.edu/catalog)) is subject to change and will be updated. Students are responsible for monitoring the website concerning changes to policies and procedures that might affect their progress toward graduation and regularly check campus mailboxes and Philadelphia University email as a means of keeping informed.

### **RETENTION OF STUDENT WORK**

Projects, examinations and assignments completed by students in their required courses may be selected to become part of the University’s collection for purposes of exhibition, assessment and/or accreditation. Student work not selected for that purpose is generally stored for only 30 days into the following semester.

### **SCHEDULE CHANGES**

Schedule changes, including changing sections, replacing courses with another course, auditing a course, independent study, course by appointment or changing a course from graded to credit/non-credit must be made by the “last day to add” deadline. See current Academic Calendar.

### **STUDENT RECORDS**

The Family Educational Rights and Privacy Act (FERPA) is a federal law governing privacy rights in university records for students and for dependent students' parents. FERPA was passed by Congress in 1974 to provide students the ability to access and review their records and to protect the confidentiality of their records within certain guidelines. Access to the information in a student's records (including access to grades) is generally not permitted to outsiders (third parties) without the student's written consent.

#### **I. To Whom Does FERPA Apply?**

For the purposes of this policy, Philadelphia University defines student as any person who attends or has attended Philadelphia University.

## **II. To Which Records Does FERPA Apply?**

Philadelphia University defines education record as any record in any medium maintained by Philadelphia University that is directly related to a student, EXCEPT:

1. A personal record kept by a staff member, if it is kept in the personal possession of the individual who made the record, and information contained in the record has never been revealed or made available to any other person except the maker's temporary substitute;
2. An employment record of an individual whose employment is not contingent on the fact that he or she is a student, provided the record is used only in relation to the individual's employment;
3. Records maintained by the office of Student Health Services if the records are used only for the treatment of a student and made available only to those persons providing treatment;
4. Alumni records that contain information about a student after he or she is no longer in attendance at Philadelphia University and the records do not relate to the person as a student;
5. "Directory information." Philadelphia University designates the following items as Directory Information: student name, addresses, telephone numbers, email addresses, major and minor fields of study, credits for which a student is registered (FT or PT status), participation in officially-recognized activities and sports, dates of attendance, degrees and awards received, date of graduation, most recent previous school attended, and photographs. Philadelphia University may disclose any of those items without prior written consent, unless notified in writing on the form available from the registrar no later than the "last day to add" (see Academic Calendar) of the fall, winter, spring or summer terms. Such notice shall be effective only until the end of the academic year during which it is given. An online student directory listing each student's name, permanent address/phone number and local address/phone number is created each fall by the Office of the Dean of Students and the Office of Information Technology. The directory is password protected and only available to individuals affiliated with the university.

## **III. How Are Students Informed About FERPA?**

Students will be notified of their FERPA rights through the annual distribution of the University Academic Catalog and the Student Handbook.

## **IV. How May Students Inspect Their Records?**

Students may inspect and review their education records upon written request to the Office of University Registrar. The request must identify as precisely as possible the record or records he or she wishes to inspect.

The record custodian or an appropriate Philadelphia University staff person will make the needed arrangements for access as promptly as possible and notify the student of the time and place where the records can be inspected, if the inspection cannot be done at the time of request. Access will be given in 45 days or less from the receipt of request.

When a record contains information about more than one student, the student may inspect and review only the records which relate to him or her.

## **V. When May the University Refuse Student Access to Records?**

Philadelphia University reserves the right to refuse to permit a student to inspect the following records:

1. The financial statement of the student's parent(s);
2. Letters and statements of recommendation for which the student has waived his or her rights of access, or which were placed in the files before January 1, 1975;
3. Records connected with an application to attend Philadelphia University or a component unit of

Philadelphia University if that application was denied;

4. Those records which are excluded from the FERPA definition of education records.

#### **VI. When May the University Refuse to Provide Copies of Records?**

Philadelphia University reserves the right to deny transcripts or copies of records not required to be made available by FERPA in any of the following situations:

1. The student is currently attending Philadelphia University or, if a former student, lives within a commuting distance of Philadelphia University;
2. The student has an unpaid financial obligation to Philadelphia University;
3. There is an unresolved disciplinary action against the student.

However, even in the above situations, students will not be denied the right to inspect their records. Philadelphia University will not normally issue copies of any document if an original or source document exists elsewhere (e.g., records from other schools).

#### **VII. Where Are Students' Education Records Kept?**

The following is a list of the types of records that Philadelphia University maintains, their locations and their custodians.

Admissions Records

Location: Office of the University Registrar, Archer Hall, First Floor

Custodian of Records: University Registrar

Cumulative Academic Records

Location: Office of the University Registrar, Archer Hall, First Floor

Custodian of Records: Registrar

Athletic Records

Location: Athletics Office, Althouse Hall

Custodian of Records: Director of Athletics

Student Conduct/Disciplinary Records

Location: Office of the Dean of Students, Kanbar Campus Center, 2nd Floor

Custodian of Records: Dean of Students

Financial Records

Location: Business Office Archer Hall, Second Floor

Custodian of Records: Controller

Financial Aid Records

Location: Financial Aid Office, White Corners, First Floor

Custodian of Records: Director of Financial Aid

International Student Affairs Records

Location: International Student Services, Kanbar Campus Center, Second Floor

Custodian of Records: Director of International Student Services

Placement Records

Location: Career Services, Kanbar Campus Center

Custodian of Records: Director of Career Services

Note: Other student education records not indicated above available upon specific request.

#### **VIII. When May Students' Education Records Be Disclosed to Others?**

Philadelphia University may disclose information from a student's education records only with the written consent of the student, EXCEPT:

1. To Philadelphia University officials who have a legitimate education interest in the

records. Philadelphia University officials include persons employed by Philadelphia University in supervisory, academic, research, or support staff positions, and persons employed by or under contract to Philadelphia University to perform a special task, such as an attorney, auditor, or collection agent, university security unit, persons serving on the board of trustees, or a student serving in an official committee such as disciplinary or grievance committee, or students assisting another school official in performing his or her official task. A Philadelphia University official has a legitimate education interest if he or she is performing a task which is part of their responsibilities or contract agreement, or performing a task which is related to the student's education, or performing a task related to the discipline of a student, or providing a service or benefit to the student, such as health care, counseling, job placement, or financial aid.;

2. To officials of another school, upon request, in which a student seeks or intends to enroll or has enrolled, although such information is usually transmitted only in response to a specific written request from the student;
3. To certain officials of the U.S. Department of Education, the Comptroller General, and state and local education authorities, in connection with certain state or federally supported education programs;
4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid;
5. To organizations conducting certain studies for or on behalf of Philadelphia University;
6. To accrediting organizations to carry out their functions;
7. To comply with a court order or a lawfully issued subpoena when specifically requests (student may not be notified);
8. To appropriate parties in a health or safety emergency;
9. To parents/legal guardians of an eligible student who claim the student as a dependant for income tax purposes. The University informs parents/guardians where it deems appropriate;
10. In cases of violent crime, the results of any disciplinary proceeding conducted by the University against an accused student to the alleged victim.

A log shall be maintained in each student record to document the use of that record by individuals other than University officials. The log shall indicate the date of the request, the individual or the organization using the record, and the purpose for which it was used. The student (or parent/guardian of a dependent student) may inspect and review this log.

#### **IX. How May a Student Make Changes to Education Records?**

Students have the right to request to have records corrected or amended that they believe are inaccurate, misleading, or in violation of their privacy rights. Following are the procedures for the correction of records:

1. The student must ask the appropriate official of Philadelphia University to amend a record. In doing so, the student should identify the part of the record they believe should be changed and specify why they believe it is inaccurate, misleading or in violation of his or her privacy or other rights;
2. Philadelphia University may comply with the request or it may decide not to comply. If it decides not to comply, Philadelphia University will notify the student of the decision and advise him or her of the right to a hearing to challenge the information believed to be inaccurate, misleading or a violation of the student's rights;
3. Upon request, Philadelphia University will arrange for a hearing and notify the student, reasonably in advance, of the date, place and time of the hearing;
4. The hearing will be conducted by a hearing officer who is a disinterested party (although he or she may be an official of the institution). The student will be afforded a full and fair opportunity to present evidence relevant to the issues raised in the original request to amend the student's education records.

The student may be assisted by one or more individuals, including an attorney;

5. Philadelphia University will prepare a written decision based solely on the evidence presented at the hearing. The decision will include a summary of the evidence presented and the reasons for the decision;
6. If Philadelphia University decides that the challenged information is not inaccurate, misleading or in violation of the student's rights of privacy, it will notify the student that he or she has the right to place in the record a statement commenting on the challenged information and/or a statement setting forth reasons for disagreeing with the decision;
7. The statement will be maintained as a part of the student's education records as long as the contested portion is maintained. If the student requests disclosure of the record which contains the contested portion, he or she may indicate that the files also contain the student's statement, which will then accompany any disclosure of the record;
8. If Philadelphia University decides that the information is inaccurate, misleading or in violation of the student's right of privacy, it will amend the record and notify the student that the record has been amended.

The provisions of this section may not be used to challenge course grades.

#### **X. To Whom May a Student Complain if Issues Arise?**

Students who believe that Philadelphia University is not complying with the requirements of the Family Educational Rights and Privacy Act or the regulations issued by the Department of Education implementing that act, may file complaints in writing with:

##### **The FERPA Office**

U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, D.C. 20202

The full text of the Family Educational Rights and Privacy Act as amended, and the full text of the final regulations of the U.S. Department of Education for the implementation of the Act, is available for inspection at the Office of the University Registrar.

#### **TRANSCRIPTS**

Process for requesting a transcript can be found on the web at [www.philau.edu/registrar/forms.htm](http://www.philau.edu/registrar/forms.htm)

**The fee for a transcript is \$5.00 per copy, \$10 for same day copy, and \$20 for an overnight copy which must be received by 10 a.m.**

Please note that unofficial copies of the transcript are available to **currently enrolled students** through their Web Advisor account.

##### **Transcript Request Information**

The University no longer accepts credit card payments for transcripts over the phone or via fax. Students must use the online form to pay via e-check or credit card. The University only accepts credit card payments online.

An official transcript is placed in a sealed envelope and bears the University seal and signature of the University Registrar. In order to release a transcript, the University Registrar's Office needs to verify the identity of the student as well as receive a formal, written request bearing the signature of the student.

To request a transcript, please do one of the following options:

- Complete the online request form, make payment online via credit card or e-check, print the transcript request email and forward the signed and dated request to the Registrar's office via fax at 215-951-2742 or scan and email the signed form to Transcripts@PhilaU.edu.
- If students are paying cash (or if you would like to bring in a check) you will need to fill out the Transcript Request Form for Walk-Ins and take the payment to the Cashier's window in the Student Account Office (1st floor of Archer Hall) and then bring the form with proof of payment back to the Registrar's office. The University does not accept mailed payments for Transcript Requests.
- A student having financial obligations to the University will not be issued a transcript.

*See catalog "Unadjusted Indebtedness."*

### **UNADJUSTED INDEBTEDNESS**

No diploma, certificate, official grade report, transcript or recommendation will be granted to any person who has any unadjusted indebtedness to the University.

### **WITHDRAWAL FROM THE UNIVERSITY**

It is absolutely essential that students follow the proper withdrawal procedure in order to be assured of an honorable dismissal from the University. Students are considered in attendance until this formal notification is completed and returned to the University Registrar.

The deadline to withdraw from the University without any record of courses or grades of the current semester is the same as the "last day to drop without a W grade." – See Academic Calendar.

If a student withdraws from the University before the "last day to withdraw from a course," all withdrawal grades will be a "W" and will affect Academic Standing upon return to the University. If a student withdraws after the "last day to withdraw from a course" all withdrawal grades will be a "WF" and will affect the G.P.A calculations and Academic Standing upon return to the University.

If they are withdrawing during the exam period they will receive "WF" grades for all their courses. If an instructor has entered a grade, the grade entered by the instructor will not be changed. Please note that an "F" and "WF" grade have the same effect on the GPA and Academic Standing. The "WF" grade identifies a late withdrawal.

Students, who need to leave the University after the "last day to withdraw from a course" due to serious circumstances, must seek permission from the Dean of Students for late withdrawal. Students who receive permission will receive "W" grades.

Withdrawal forms are available online on the University Registrar's webpage <http://www.philau.edu/registrar/>. To return to the University after withdrawal, see the section on "Re-entry to the University."

*See "Leave of Absence"*

## **2/UNDERGRADUATE STUDENT ACADEMIC POLICIES**

(Unique to Traditional, Accelerated and Non Degree Students)

The following are the general policies and procedures unique to the students pursuing coursework in the undergraduate programs of the University.

In addition to the following Undergraduate Student Academic Policies, students are expected to review the Common Academic Policies for all students. Continuing and Professional Studies students should also refer to the CPS handbook.

Topics for this section are organized in alphabetical order.

## **ACADEMIC ADVISING-UNDERGRADUTAE**

Philadelphia University's academic-advising model supports students throughout their academic career at the University. Academic advisors assist students in developing suitable educational plans, understanding program requirements, policies, and resources, evaluating their academic progress, and clarifying realistic life and career goals.

Advising for first-year students (freshmen and new transfer students) and students who have not declared their majors is provided at the Learning and Advising Center. Faculty Advisors in the Learning and Advising Center actively reach out to their advisees in order to assist them in their academic life. First-year students may meet with ANY first year advisor at the Learning and Advising Center on a drop-in basis Monday-Friday from 9 a.m. to 5 p.m. All first-year students **MUST** meet with a first-year advisor before November of their first semester for assistance with Pre-registration for Spring.

Other advising services for all students in the Learning and Advising Center include assistance in understanding transfer credit evaluation, majors advising for students who have not declared a major or who are thinking of changing their major, change of major forms and other advising forms.

Upper-level students (sophomore through 5<sup>th</sup> year) who have declared their majors are assigned advisors in their colleges. These students are expected to assume increasing responsibility for their progress toward graduation. Students must contact their advisor to set up advising appointments at least twice during the academic year. They are expected to consult with their advisors concerning course registration for fall and spring semesters. While upper-level advisors are available to discuss program requirements and policies, emphasis is placed upon working with students to clarify their educational, personal and career goals.

Advising for all accelerated programs is provided through the School of Continuing and Professional Studies in The Tuttleman Center.

## **ACADEMIC HONORS**

Undergraduate students enrolled in at least 12 semester credits, nine of which are graded, and who earn a semester grade point average of 3.60 or better are eligible for the Dean's List for that semester.

- A candidate for graduation who earns a cumulative grade point average of 3.60-3.69 will be graduated "cum laude," 3.7-3.79 will be graduated "magna cum laude" or "summa cum laude" if their final average is 3.80 or better.
- Additional awards are presented at the annual University Awards Ceremony and during Commencement.

## **ACADEMIC STANDING**

A student's academic standing is determined at the end of each full-time or part-time semester on the basis of cumulative credits and cumulative grade point average according to the following table. To retain good academic standing, students must have a cumulative grade point average of 2.0 and have earned 75% of the total credits attempted.

Evening (Continuing Professional Studies) students will be evaluated at the conclusion of their first 12 academic hours. Students in good academic standing will be evaluated at the end of each term. Students' who are not in good academic standing after the first review at 12 hours, will have an additional 12 hours to be restored to good academic standing.

## **Probation**

Students with a cumulative GPA below 2.0 and those who have not earned 75% of the credits they attempted (known as normal progression to degree) will be placed on academic probation. Students will

be required to sign a student success contract with their advisor and meet with their advisor regularly. Students on academic probation may also be on financial aid probation. They are encouraged to keep in close contact with their financial aid counselor. Advisors may find a copy of the student success contract on the Learning and Advising website.

Academic probation is a means of emphatically informing students that their record is unsatisfactory while there is still time to remedy the situation. Students will be placed on academic probation whenever their records indicate that normal progress toward a degree is in jeopardy. Probation is not meant to be a penalty, but should be interpreted as a serious warning to improve the quality of academic work. Students on probation are not permitted to take more than a normal course load, and may be required to take a reduced course load. Students on academic probation will not be able to participate in intercollegiate athletics or hold an elected or appointed office in any SGA-recognized student organization. Students on probation should reduce the number of hours of employment whenever possible and limit participation in any other extracurricular activities that interfere with the performance of their academic work.

**Dismissal/Terminal Probation**

If the student is placed on probation and remains on probation at the end of the following semester, the student will be dismissed from the University. Students will receive written notification of academic dismissal and may appeal for reinstatement by submitting a written request for reinstatement to Learning and Advising by the dated listed in the letter. The petition for reinstatement should include:

1. An explanation of the poor academic performance that led to the dismissal, i.e. insufficient credits earned and/or low GPA.
2. An explanation of whether the student worked with his/her academic advisor, sought tutoring assistance or accessed other support services to address academic performance.
3. Documentation concerning any mitigating circumstances that may have contributed to poor performance. This includes but is not limited to medical or psychological documentation.
4. A plan for preventing recurrence of these academic difficulties and for raising credits and/or the GPA above the minimum standard for continued enrollment.
5. Letters of support from the academic advisor, professors or other support staff (optional).

Members of the Academic Standards Committee will review petitions for academic reinstatement. Written notification will be made as soon as practical, no later than one business day prior to the beginning of the enrollment period for which the student is seeking reinstatement.


If a student is readmitted to the University following an appeal to the Undergraduate Academic Standards Committee, a semester will be stipulated for their re-admission. If students wish to enter more than one year from the original semester indicated on their letter, their request must be resubmitted to the Undergraduate Academic Standards Committee for re-evaluation.

Students placed on terminal probation must meet the stipulations established for them. Failure to do so will result in automatic dismissal from the University

*See "Re-entry to the University."*

Prior Academic Standing		New Curriculum GPA	New Academic Standing
Good	One Term (full-time or part-time)	2.00 or higher	Good
Good		Less than 2.00 and/or less than 75%	Probation



		credits attempted.	
Probation		2.00 or higher	Good
Probation		Less than 2.00 and/or less than 75% credits attempted.	Dismissal
Dismissal	(committee permits continuation)		Terminal Probation
Terminal Probation		2.00 or higher	Good
Terminal Probation		Less than 2.00 and/or less than 75% credits attempted.	Dismissal
Withdrawal/Probation			Re-entry/Probation

## ADVANCED PLACEMENT

Students who have taken Advanced Placement (AP) exams and received the necessary minimum score will receive credit for the courses listed below. These guidelines have been in effect since January 2004. Students must formally submit their Advanced Placement Scores from the Educational Testing Service (ETS) directly to the Admissions Office before their first semester at the University and no later than their second semester in residence. Those students who delay sending the University their AP test results until after matriculation may be required to register for courses for which they would have received AP had the information been submitted earlier. It is in students' best interests to submit all AP scores as soon as possible. Students who do not submit their scores until after their second semester in residence will not have their scores honored, pending appeal to the Director of Learning and Advising Center.

AP Exam Name	Score	Course Equivalents
Art History	4,5	ARTH-101 or ARTH-102
Art-Studio/Drawing	4,5	DRAW-101 or VSDRW-101
Art-Studio/General Art	4,5	Free elective (3 cr.)
Biology (non-science major)	3,4,5	BIOL-101
Biology (science major)	4,5	Free elective (3 cr.)
Chemistry (non-science)	3,4,5	CHEM-101
Chemistry (science major)	4,5	Free elective (3 cr.)
Comparative Government &	3,4,5	Social Sciences I (3 cr.)
Economics-Macroeconomics	3,4,5	ECON-205
Economics-Microeconomics	3,4,5	ECON-206
English (Language)	4,5	WRTG-101
English (Literature)	3,4,5	Humanities I (3 cr.)
Environmental Science	3,4,5	SCI-101 or Free elective (3 cr.)
European History	3,4,5	Historical Understanding I (3 cr.)
French (Language)	3,4,5	Language Studies (3 cr.)
French (Literature)	3,4,5	Language Studies (3 cr.)
German (Language)	3,4,5	Language Studies (3 cr.)
Human Geography	3,4,5	Free elective (3 cr.)
Latin (Literature)	3,4,5	Free elective (3 cr.)
Latin (Virgil)	3,4,5	Free elective (3 cr.)
Mathematics-Calculus AB	3	MATH-102
Mathematics-Calculus AB	4,5	MATH-111
Mathematics-Calculus BC	3	MATH-111

Mathematics-Calculus BC	4,5	MATH-111 and MATH-112
Music Theory	3,4,5	Free elective (3 cr.)
Physics B (non-science major)	3,4,5	PHYS-101
Physics B (science major)	3,4,5	PHYS-101 or Free elective (3 cr.)
Physics C	3,4,5	PHYS-201 & PHYS-201L or Free
Psychology	3	Free elective (3 cr.)
	4,5	PSYCH-101
Spanish (Language)	3,4,5	Language Studies (3 cr.)
Spanish (Literature)	3,4,5	Language Studies (3 cr.)
Statistics	3,4,5	STAT-201
United States History	3,4,5	Historical Understanding I (3 cr.)
U.S. Government & Politics*	3,4,5	Social Sciences I (3 cr.)
World History	3,4,5	Historical Understanding I (3 cr.)

*\*If both Comparative Government & Politics and U.S. Government & Politics are taken, one becomes 3 credits free elective. See "Credit by Examination"*

#### **AUDITING A COURSE**

A student who wishes to attend a course regularly, but does not wish to receive credit for the course, may request permission to audit from the Manager of Academic Operations of the college in which the course is offered. The Manager of Academic Operations will, in turn, obtain permission from the faculty member.

Students are expected to meet the requirements for auditors, which are established by the faculty member teaching the course. Following the completion of the course, the faculty member will determine whether these requirements have been satisfied and, if so, the notation of "AU" will be posted on the transcript.

Tuition and fees to audit the course are the same as those when taking the course for credit.

Students must register for an audit course the same way they would for any other. In addition, they must complete the "Request for Permission to Audit a Course" form requesting permission to audit, and submit the signed form to the Registrar before the "last day to add" (see Academic Calendar). At that time, the decision becomes final. Form available on the Registrar's website, <http://www.philau.edu/registrar/>.

Audit courses cannot be applied toward degree requirements.

*See "Schedule Changes."*

#### **CHANGE OF MAJOR**

Students who wish to request a Change of Major (Curriculum) must obtain the proper form from the Learning and Advising Center or the webpage at [www.PhilaU.edu/learning](http://www.PhilaU.edu/learning). Continuing and Professional Studies students should contact the School of Continuing and Professional Studies. Completing a Change of Major form requires multiple signatures prior to formally making the change. Please see the "change of major" form for details.

Students, who request a Change of Major into the following programs: Animation, Architecture, Health Sci/OT, Environmental Design & Visual Studies, Interactive Design & Media, Psychology/OT, all Engineering majors, Fashion Design, Graphic Design Communication, Industrial Design, Interior Design, Landscape Architecture and Health Sci/Physician Assistant Studies must consult with the Learning and Advising Center because certain timelines, stipulations and additional signatures may be required.

### **COURSE LOAD AND COURSE OVERLOAD**

Students enrolled in 12 to 18.5 credits per semester are considered enrolled full-time and will be billed at the comprehensive tuition rate. Students taking less than 12 credits per semester are considered part-time and will be billed at the per credit rate. Students enrolled in more than 18.5 credits per semester are enrolled in an overload. Students enrolled in an overload will be billed the comprehensive rate plus the overload per credit charge for all credits over 18.5.

### **COURSES TAKEN ELSEWHERE**

From time to time, matriculated students may find it necessary to take courses at another college or university. Students may also seek permission to take courses at another institution during the academic year if specific courses are not available at Philadelphia University.

Permission to take courses at another institution will be granted only if the courses at the other institution are determined to be equivalent to courses at Philadelphia University by the respective program director or associate dean after a faculty review of the corresponding course description. Generally, permission to take courses equivalent to Philadelphia University junior- and senior-level courses will be granted only if the other institution is a four-year college or university. Students may not take junior- and senior-level courses at a two-year or community college.

Students must fulfill their residency requirement at Philadelphia University. See *“Residency Requirements.”*

If the student earns the equivalent grade of “C-” or higher for an approved course, Philadelphia University will grant credit for the course. Students should not take courses at other institutions on a “Credit/No Credit” or “Pass/Fail” basis, as the University will not accept such a grade toward a Philadelphia University degree. Grades earned at another college or university are NOT made part of the student’s Philadelphia University transcript; rather, the credits will be considered only for transfer credit.

It is the responsibility of the students to:

- Secure a catalog description from the other institution and verify that the intended course will be offered.
- Obtain a “Permission to Take Courses at Another Institution” form online at the Learning and Advising Center website at [www.PhilaU.edu/learning](http://www.PhilaU.edu/learning). The completed form must be submitted at least six weeks before courses begin at the other institution.
- Take the form and the catalog course description(s) to the following individuals for review and approval: (1) a faculty member in the appropriate academic area to verify equivalency of the intended course; and (2) the Associate Dean for College Studies courses equivalency, or the program director or Associate Dean for course equivalency in the major. Submit a copy of the form to your advisor and retain a copy for your records.
- Submit the completed form to the University Registrar. As a general rule, a student will not be permitted to take a course at another institution if the course is being offered by Philadelphia University and if, at the time the student wishes to take the course, the student is residing within 30 miles of the University. Students should not plan to take more than two courses at another institution in any term, including the summer. Students must be in good academic standing at the

University and must be in residence at Philadelphia University during the semester immediate preceding the awarding of the degree.

The Registrar will send a letter to the college or university for permission to take the course(s). Copies will be supplied to the student and to the student's advisor.

The student must make arrangements for an official transcript to be sent to the Office of the University Registrar after completion of the off-campus course work. No credit will be evaluated until that office has received an official transcript. No credits will be transferred without prior approval.

### **CREDIT BY EXAMINATION-UNDERGRADUATE**

The University recognizes the fact that learning also takes place beyond formal classroom situations. Since the function of credit by examination is to provide students the opportunity to be placed in the most advanced courses for which they are qualified, all credit by examination results from Advanced Placement Exams, CLEP and International Baccalaureate (IB credit) earned prior to matriculation at Philadelphia University must be submitted within two regular academic semesters (30 credits) of the student's initial matriculation.

*See "Advanced Placement."*

### **National Testing Agencies**

The University will grant credit to students who obtain satisfactory grades in specific subject examinations developed by the Advanced Placement Program (AP), International Baccalaureate Program (IB) and College Level Examination Program (CLEP). Students who enter the University with AP, IB or CLEP credit will have that credit evaluated in conjunction with the guidelines established for granting transfer credit. Matriculated traditional undergraduate students may not pursue further CLEP credit while enrolled at the University. Students in Continuing and Professional Studies should check with the School of Continuing and Professional Studies for current CLEP guidelines.

In cases where several CLEP examinations have been taken, credit from the subject examination will be assigned before credit from the general examination. Credit assigned from successful completion of the general examination may not be utilized for free electives or upper-division degree requirements.

The University awards credit for the Higher Level International Baccalaureate examinations on a case-by-case basis if students have achieved a score of 5 or higher. No credit will be awarded for subsidiary level examinations.

*See "Advanced Placement."*

### **CREDIT/NO CREDIT OPTION-UNDERGRADUATE**

Students are permitted to take up to four courses during their enrollment in a bachelor's degree program on a "Credit/No Credit" (CR/NC) basis, not counting any CR/Internship course.

Any course may be taken on this basis except COLLST-499, MATH-099, READ-099, WRTG-100, WRTG-101, WRTG-101G and WRTG-2XX. Students are also encouraged to consult with their program directors to determine whether to use the CR/NC option for required major courses. Science and Math courses offered by the College of Science, Health and the Liberal Arts must be approved and signed by the Dean.

To obtain credit, students must earn a "C-" or better in the course. The grade point average will not be affected whether credit is received for the course or not, except in certain cases where the option is used to repeat a course.

Students who elect to take a course on a CR/NC basis must notify the Office of the University Registrar on the proper form by the "last day to add" (see Academic Calendar). At that time, the decision becomes final.

Please consult with your academic advisor and the Office of the University Registrar to suggest when this option is/is not an advisable choice.

See *“Repeating Courses,”* and *“Schedule Changes”*

### **DECLARING A MAJOR**

Students at Philadelphia University registered as Undeclared are urged to declare a major after completing 30 credits. However, students are required to declare a major after completing 60 credits (30 credits in residence for transfer students). Students who are unsure about their choice of major should take advantage of majors advising at the Learning and Advising Center.

### **DIVISION CHANGE**

Students wishing to transfer to Continuing and Professional Studies to finish their degree requirements should complete a Continuing Studies Application for Admission form available at that office in The Tuttleman Center. If a student will ultimately be certified for graduation by the undergraduate division, academic advising will remain the responsibility of the day-division advisor.

Continuing and Professional Studies students wishing to transfer to the undergraduate division to finish their degree requirements should complete an Application form available at the Office of Admissions.

Students who have been dismissed from the University for academic reasons must apply through the admissions office and must be readmitted by the Undergraduate Academic Standards Committee before registering for additional courses at the University.

See *“Academic Standing.”*

### **DOUBLE DEGREE/SECOND BACCALAUREATE DEGREE**

Students who have received one baccalaureate degree from Philadelphia University and who wish to seek a second such degree in another curriculum are required to complete all the additional course requirements and fulfill a second residence requirement of a minimum of 33 credits. At least 12 credits must be in the new major. Students interested in this possibility should consult with their faculty advisor or the School of Continuing and Professional Studies for further information.

### **DOUBLE MAJOR**

Students wishing to earn a double-major must do so by completing all requirements for the “primary” major and all required courses in the “secondary” major. Only students of demonstrated ability, i.e. 3.0 cumulative GPA or higher, will be approved for double-major status.

The equivalent of **at least ten (10) courses must be unique to each major**. This minimum course-requirement may mean that students have to take advanced electives in one program in addition to the listed core requirements in order to establish the uniqueness of each intellectual discipline and to assure the intellectual integrity of each. At least four courses (12 cr) of upper-level work must be completed in-residence at Philadelphia University in each major. The same course(s) may not be used to satisfy residency requirements in both majors.

Students wishing to pursue a double-major should discuss their options first with their faculty advisor and then with a faculty advisor from the “secondary” major. The double-major option must be declared/approved once a student has reached junior-standing (60 cr.) and at least one calendar year prior to the student’s anticipated graduation date.

Students must submit the “Approval of Double-Major” form to the Office of the University Registrar so the student’s transcript and degree audit will record completion of the two majors’ degree requirements. The form, available online from Learning and Advising, [www.PhilaU.edu/learning](http://www.PhilaU.edu/learning), lists required courses for the “secondary” major, approved by both advisors. A list of required courses for the

“secondary” major, approved by both advisors, must be added to the advising file for pre-certification purposes.

Students may not utilize credits allocated to an option, concentration or *designated* elective in the “primary” major to satisfy requirements for the “secondary” major and vice versa. Students may utilize credits allocated to a minor or to free electives in the “primary” major to satisfy requirements for the “secondary” major. Students selecting a double-major will be exempt from any mandatory minor requirements that would otherwise apply.

Students completing a double-major will receive **one** degree and **one** diploma. If the two completed majors bear different degree designations (e.g., BSE, BArch, BS), during the precertification process, the student will have the option to select the degree designation that will appear on the transcript and diploma.

A student with a double-major may graduate upon completion of all requirements for both majors as described above, or may default to a single major by submission of written notification to the Registrar’s Office and the student’s certifying officer. If a student defaults to a single-major option, the student may then graduate upon completion of all requirements for that one major, but may not continue at the University for completion of the second major.

In some cases the combined requirements of the two majors will necessitate completion of a greater total number of credits than either major taken separately, and depending on the term-to-term load, will most likely incur additional tuition charges according to the standard University policy for course overloads. There is no guarantee that the double-major will be funded by the student’s financial aid and/or scholarships. (*Students should review all approved academic plans with the Financial Aid Office to establish what courses will be funded.*) Completing more than one major will not necessarily improve the chances of admission to a graduate program or increase prospects in career goals. Furthermore, individuals with more than one major can significantly reduce opportunities to explore more wide-ranging elective coursework, internships, study abroad and areas of personal interest.

## FUNDAMENTALS COURSES

The Fundamentals courses include MATH 099 (Fundamentals of College Mathematics) and READ 099 (Fundamentals of College Reading and Study Skills)-

Placement into Fundamentals courses is determined by SAT scores; and for Math a self-screening trigonometry questionnaire.

For purposes of calculating the student’s course load, each of these courses counts as three credit hours. However, they will not count as credits toward graduation. Fundamentals courses may not be used to satisfy the residency requirement or for use as free electives.

Students must complete these courses within three semesters of matriculation. Part-time students who are required to take Fundamentals courses must complete these requirements within the first 30 credits for which they register. All Fundamentals courses must be completed in residence at the University.

Students must earn a “C” (2.00) or better to receive credit for Fundamentals courses. Students who earn less than a grade of “C” must repeat that course in the next semester in which it is offered. Grades in Fundamentals courses enter into the calculation of a student’s grade point average.

Students who are required to take Fundamentals of College Mathematics must pass that course before taking any other mathematics course and certain science courses. Students required to take fundamentals of College Reading must pass the course before taking any History courses.

Students may not withdraw from a Fundamentals course. The director of the Learning and Advising Center must approve any exceptions in writing. Students who fail to complete a Fundamentals course successfully after two registrations may not register for that course a third time without the permission of the director of the Learning and Advising Center.

Students who fail to complete all Fundamentals course requirements within the prescribed time may be dismissed from the University.

### GRADE POINT AVERAGE/GRADING

The unit of credit is the semester hour.

Quality points are assigned to letter grades according to the following scale:

A =	4.00	C =	2.00
A- =	3.67	C- =	1.67
B+ =	3.33	D+ =	1.33
B =	3.00	D =	1.00
B- =	2.67	F =	0.00
C+ =	2.33		

The quality points earned are computed by multiplying the numerical value of the letter grade by the number of semester credit hours for the course. The Grade Point Average (GPA) is determined by dividing the total quality points earned by the total semester credit hours attempted. A sample calculation follows:

Course Number/Name		Credits	Letter	Quality Point Value	Quality Points Earned
WRTG-101	Writing Seminar I	3	B	3.00	9.00
MATH-111	Calculus I	4	C+	2.33	9.32
TEXT-101	Survey of the Textile Industry	3	A-	3.67	11.01



ENGR-104	Introduction to Computing	3	F	0.00	0.00
CHEM-103	Chemistry I	4	D	1.00	4.00
PE-25	Stress Management	.5	CR	---	---
Grade Point Average (GPA) = Quality Points Earned ÷ Credits Attempted = 33.33 ÷ 17 = 1.96					

### GRADING SYSTEM-UNDERGRADUATE

The University uses a plus/minus grading system. The passing grades for the University are “CR,” “A,” “B,” “C” and “D.” A grade of “F” signifies that the course has been failed.

Grade descriptions are listed below:

**A = Excellent.**

Awarded to students who demonstrate an excellent understanding of the subject matter, and who have achieved outstanding results in fulfilling the course objectives.

**B = Above Average.**

Awarded to students who demonstrate above-average understanding of the subject matter, and who show consistent achievement beyond the usual requirements of the course.

**C = Average.**

Awarded to students who perform at the satisfactory level, and demonstrate acceptable levels of understanding of the subject matter commensurate with continued study in the next successive course.

*(Note: To graduate, a student must have a cumulative grade point average of 2.00 or better.)*

**D = Below Average.**

Awarded to students as evidence of less than average understanding of the subject matter and of weak performance. It indicates insufficient preparation for students to enroll in any course reliant upon an acceptable level of understanding of the particular subject matter. A grade of “D” (1.00) represents a minimum grade necessary to receive credit for the course.

**F = Failure.**

Awarded to students showing poor understanding of the basic elements of the course.

**I = Incomplete.**

The “I” grade indicates that a student has missed some portion of required course work because of illness or another emergency beyond his or her control. It indicates that the student, with the approval of the professor has agreed in writing to complete the missing course requirements within an extended period of time, not to exceed four weeks after the end of a term. (See current Academic Calendar for the exact date.) The professor has sole authority to grant or deny such a request. Failure of the student to complete the agreed-upon work in the prescribed time frame will result in a grade of “F” for the course. To obtain an “I” grade the student must submit an Incomplete Form to the professor for approval before the due date for final grades to be submitted to the Registrar. Copies of the form are available online on the University’s Registrar’s website, [www.philau.edu/registrar](http://www.philau.edu/registrar).

Students who earn an “F” or “NC” grade are required to repeat the same course during the next term in which it is offered, if the course is the only course that will satisfy the requirement, or they wish to have the failing grade replaced on the transcript.

*See “Auditing a Course,” “Grade Point Averages,” “Credit/No Credit Option,” “Fundamentals Courses,” “Academic Internships,” “Physical Education & Service Learning” and “Repeating Courses.”*

**GRADUATION REQUIREMENTS-UNDERGRADUATE**

Certification for a baccalaureate degree may be processed by either the Undergraduate Program or the Continuing and Professional Studies Program, depending on where the majority of the candidate’s credits for the degree was earned. Certification for an associate degree and degree-completion programs administered through the School of Continuing and Professional Studies will be conducted by that office.

The University holds a Commencement ceremony once each year during the month of May. Students who complete all requirements for graduation by the end of the spring semester may participate in the Commencement ceremony. Degrees are awarded at the end of the semester in which all requirements are met. Students who have completed degree requirements in August or December may participate in the Commencement ceremony the following May.

To graduate, students must fulfill the University’s residency requirements, pass all required courses and have a cumulative grade point average of 2.00 or better. A candidate for graduation who earns a cumulative grade point average of 3.60-3.69 will be graduated “cum laude,” 3.7-3.79 will be graduated “magna cum laude” or “summa cum laude” if their final cumulative average is 3.80 or better.

Any student who has financial obligations to the University is ineligible for graduation until such obligations have been fulfilled.

Participation in the Commencement ceremony does not necessarily represent conferral of the degree.

*See “Residency Requirements.”*

**GRADUATE COURSES FOR UNDERGRADUATE STUDENTS**

Undergraduate students who have earned a minimum of 90 credits and whose cumulative grade point averages are 3.00 and better may enroll in a graduate course with the permission of the respective graduate program director.

**HONORS PROGRAM**

The Honors Program welcomes highly-motivated students who demonstrated academic excellence in high school or in the first and second semesters at Philadelphia University.

Participants in the Honors Program enjoy advanced levels of inquiry, smaller class sizes and seminar-style instruction in Honors sections of College Studies courses. In many cases, Honors classes offer opportunities to take advantage of co-curricular experiences in the form of field trips, guest lectures, etc., that help interpret the course material. In addition, Honors Program students can arrange extended borrowing privileges at the University’s library.

Honors Program students are required to complete seven Honors courses. Exciting options for Honors credit range from the traditional Honors courses to individualizing the experience while studying abroad, taking on a leadership role in a community-service project or tailoring a research project. The senior year capstone course, Contemporary Perspectives, must be taken at the Honors level. In special cases, students can arrange a guided project in courses in their major (upgrades). Honors course offerings are listed each semester in the University's course schedule. Students enrolled in Honors courses must take the course for a letter grade. The "pass/fail" or CR/NC option is not available for Honors courses.

Enrollment in Honors courses is designated on the University transcript and remains part of the student's permanent academic record. Honors Program students' academic records are reviewed periodically to assure that participants are making acceptable progress toward graduating with the designation of Honors Program Scholar. Students successfully completing all Honors Program requirements with a minimum GPA of 3.4 receive special recognition at graduation, the Honors Medallion and the Honors Certificate.

*More information about the Honors Program in section, "University Academic Resources and Services" of the Academic Catalog.*

### **OVERLOAD CHARGES**

If a full-time undergraduate student is registered for more than 18.5 credits he/she will be charged at the overload per credit rate for all credits in excess of 18.5 in addition to the comprehensive tuition rate.

### **PART-TIME TUITION CHARGES**

Part-time students (taking fewer than 12 semester credit hours) are charged at the applicable per-credit rate.

### **PHYSICAL EDUCATION AND/OR SERVICE LEARNING**

Undergraduates are required to successfully complete two semesters (one credit total) of physical education, (PE) or a one credit service learning course, SERVE-101.

The University offers a variety of opportunities for students to earn PE credits including traditional instruction, varsity sports or the opportunity to participate in the University's extensive intramural program. Additional physical education courses may be taken for elective credit.

SERVE-101 may also be taken in up to four semesters for students to earn free elective credit as well as the service learning credit. Grades will be reported as either "Credit" or "No Credit." For more information about SERVE-101 see "Undergraduate Academic Programs" section of the Academic Catalog.

Students, who enter the University with an associate or bachelor's degree, or 54 or more accepted transfer credits, are exempt from this requirement. Please note, even if the PE/Service Learning requirement is waived, students are still responsible for the total number of credits required in the program.

*See "Attendance."*

### **PLACEMENT TESTING**

#### **S.T.A.R.T.**

The University administers an online placement test for placement decisions about the appropriate writing course, either WRTG 100 or WRTG 101, for all first-time undergraduate day-division students, including international students. This online placement test **MUST** be completed **BEFORE** a student comes to campus for their selected S.T.A.R.T. session. Students who have earned an Associate's Degree or who have been enrolled in another institution for thirty continuous credits or who have earned college credit for Writing Seminar 1 are exempted from writing placement testing **ONLY** if their credits have been evaluated **BEFORE** coming to their designated S.T.A.R.T. session. All first-time freshman who have not completed the online test and transfer students who have **NOT** had their writing credits

evaluated will be required to take the writing placement test during S.T.A.R.T. which will delay the receipt of their semester course rosters.

The University places first-time undergraduate day-division students in mathematics courses according to math SAT scores, major, as designated in the official University acceptance letter, as well as responses to a self-screening trigonometry questionnaire. Students who have earned AP credit in mathematics will be placed in mathematics courses according to the table listed in the Credit by Examination section of this publication. Students who have received transfer credit in mathematics will be placed considering these credits in addition to the other stated criteria.

First-time undergraduate day-division students verbal SAT score will determine their placement into Fundamentals of Reading and Study Skills (READ 099). The University will administer a reading placement exam for International Students who have not taken the SAT to determine their placement into Fundamentals of Reading.

*See "Credit by Examination," "Transfer Credit," "International Students," Fundamental Courses."*

### **Foreign Language Placement Testing**

Students who plan to enroll in French, German, Italian, Japanese or Spanish and who have studied that language for more than two years in high school, or the equivalent level elsewhere, must consult with the Coordinator of the Language Program in the College of Science, Health and the Liberal Arts.

It is recommended that students who are native speakers of French, German, Italian, Japanese or Spanish enroll in a language other than their own. Students, however, do have the option of taking challenge examinations to meet this requirement. If after taking the Foreign Language Placement Examination, it appears that the student has adequate preparation, the student may pay a challenge-examination fee, present the receipt to the College of Science, Health and the Liberal Arts and complete a challenge examination. Challenge examinations can be taken in French, German, Italian, Japanese or Spanish. Currently enrolled students may not take CLEP examinations for foreign language course credit. Advanced placement credits and transfer credits for appropriate foreign language courses taken at other institutions will be accepted.

*See "Advanced Placement," "Challenge Exam," and "Transfer Credit."*

### **RE-ENTRY TO THE UNIVERSITY-UNDERGRADUATE**

A student who wishes to re-enter as a traditional undergraduate student must submit a Re-entry Application to the Office of Admissions. A student who wishes to re-enter as an accelerated program student must submit a Continuing Studies Application form to the School of Continuing and Professional Studies.

Students who have enrolled at another college or university since their departure from Philadelphia University must present official transcripts from those schools directly to the Admissions Office for consideration in re-entry.

Upon receiving their re-entry letter, students must meet with the director of the Learning and Advising Center (day division students) or the director of Student Services in the School of Continuing and Professional Studies (evening students) prior to registering for class.

The Undergraduate Academic Standards Committee will review any application for re-entry from students who were not in good standing (less than 2.00 GPA or not met 75% of credits attempted) when they withdrew or were dismissed from Philadelphia University. During the academic year, the Committee meets only once a month so students should allow adequate time for processing. The subcommittee will also consider applications for re-entry for the fall semester during late May, so students wishing to be evaluated during this summer meeting should submit their requests for re-admission no later than May 15. The Undergraduate Academic Standards Committee must approve

any application for re-entry before a student, not in good standing, is allowed to register for additional courses at the University. The student is placed on probation during the first term of re-entry.

*See "Academic Standing."*

## **REFUND POLICY**

### **TRADITIONAL UNDERGRADUATE AND ALL ONLINE COURSES**

Students are considered in attendance until the Registrar receives formal written notice of withdrawal.

Tuition refunds will be made to traditional undergraduate programs and all students enrolled in online courses (regardless of log-in status) withdrawing from the University according to the following schedule:

100 Percent before Classes start

80 percent during the first week of classes,

60 percent during the second week of classes,

40 percent during the third week of classes

0 Percent beginning the fourth week of classes. No refund thereafter.

### **CONTINUING AND PROFESSIONAL STUDIES (CPS) AND ALL SUMMER COURSES**

**(Students enrolled in online summer courses use above policy)**

Tuition charges for Continuing and Professional Studies students who withdraw from a course will be refunded on the following schedule:

100 percent prior to first class meeting,

80 percent prior to the second class meeting,

60 percent prior to the third class meeting,

40 percent prior to the fourth class meeting,

0 percent after fourth class meeting. No refund thereafter.

Online refund is as above (under Traditional Undergraduate)

## **RESIDENCY REQUIREMENTS**

To be eligible for graduation with a degree from Philadelphia University, a student must earn a specified minimum number of credits in residence [excluding Fundamentals courses], included in which are six semester credit hours in College Studies courses and 12 semester credit hours in the major core. If a student is pursuing a double major, a second 12 semester credit hours must be completed in residence in the second major core.

To be eligible for graduation with a **Bachelor of Science** degree:

- Traditional undergraduate students must earn a total of at least 60 semester credit hours in residence at Philadelphia University; and
- Continuing and Professional Studies students must earn a total of at least 33 semester credit hours in residence at Philadelphia University; and
- Students enrolled in the B.S./Health Services Management degree-completion program must earn a total of at least 33 semester credit hours in residence at Philadelphia University.

In the case of transfer from one division to the other, the higher residency requirement will apply.

To be eligible for graduation with an **Associate in Science** degree [available only through the School of Continuing and Professional Studies], students must earn a total of at least 20 semester-credit hours in residence at Philadelphia University.

Students who need assistance in determining eligible courses in the major core should consult the certifying officer for their major in their respective College.

Credits earned through challenge exams are applied toward residency requirements.

Students must be in residence during the semester immediately preceding the awarding of the degree.

### **STUDENT STATUS BASED ON COMPLETED CREDITS**

Students are generally considered to be classified as freshmen during the first two semesters of full-time study in the University, or as long as they are working toward the completion of their first 30 credits toward the degree. Sophomores are generally considered to have completed more than 30 credits, and to be working toward the completion of up to 60 credits toward the degree. Juniors generally fall in the range of 60 to 90 credits. Students who have completed 90 or more credits are generally classified as seniors.

### **TIME LIMIT TO DEGREE AND OBSOLETE CREDITS**

Undergraduate students are expected to complete all degree requirements within 10 years from the date of initial matriculation. Students who do not meet this requirement will have their course work, including Philadelphia University credits and previously evaluated transfer credits, reviewed by the appropriate program(s) to determine the currency and appropriateness of courses toward a current degree. As a result of this evaluation, credits may be determined to be “outdated” and removed as earned credit toward the completion of degree requirements. Outdated credits will not be used in the calculation of the cumulative grade point average. Students should note that in some cases, while a particular course may still be offered, a program can determine that material covered by the course has changed substantially enough to determine the original course is outdated. Students are eligible to take a challenge exam for any outdated courses affected by the review process described above.

Students seeking re-entry to Philadelphia University beyond two full academic semesters are subject to the graduation requirements from the catalog in effect at the time of re-entry.

### **TRANSFER CREDIT**

Transfer credit for coursework at a previously attended institution is generally awarded to the entering transfer student by the Office of Admissions or the School of Continuing and Professional Studies prior to the student’s initial matriculation at this institution. Transfer credits earned prior to matriculation at Philadelphia University must be submitted within one semester of matriculation.

Undergraduate students should have transcripts sent directly to Admissions. Continuing and Professional Studies students should have transcripts sent to the School of Continuing and Professional Studies.

The University reserves the right to remove previously awarded transfer credits if a student does not illustrate a proper knowledge of the course material, or if the student does not maintain a satisfactory average.

Credit is granted only when the student has earned a grade of “C-” or better in a given course. The University may also consider the age of transfer courses when assigning credits to degree requirements. The BS/MS in Occupational Therapy programs hold to a different and higher transfer credit/grade standard. (See OT Programs under “College of Science, Health and the Liberal Arts”)

Any student who has questions concerning the transfer-credit evaluation or wishes to appeal a course-equivalency decision prior to matriculation at Philadelphia University should meet with either Undergraduate Admissions or Continuing & Professional Studies. Any student with questions about their

transfer credit evaluation after the start of their first semester should consult with Learning and Advising and the Office of the University Registrar.

See “Residency Requirements” and “Credit by Examination.”

### **3/GRADUATE STUDENT ACADEMIC POLICIES**

#### **(Unique to Graduate Students)**

The following are the general policies and procedures unique to the students pursuing coursework in the graduate programs of the University.

In addition to the following Graduate Student Academic Policies, students are expected to review the Common Academic Policies for all students, and those specific to their graduate programs.

Topics for this section are organized in alphabetical order.

#### **ACADEMIC ADVISING - GRADUATE**

Academic advising is available for each student. Questions pertaining to the program, instruction, course selection and any related matters may be discussed with an advisor. After a student is accepted into the program, an advisor is assigned by the program director.

#### **ACADEMIC INTERSHIPS-GRADUATE**

Academic internships at Philadelphia University aid students in professional preparation through a work experience directly related to their major and career goals. Graduate internship options and requirements vary by program, therefore students should first consult their academic advisor or program director for updated internship information as it pertains to their degree program.

- **Graduate internships administered by Career Services**

Programs participating in internships administered by the Career Services Center are completed as elective academic courses, including a course syllabus focused on professional skill-building and written assignments. While the primary course emphasis is on the internship work experience, course assignments are incorporated to prompt reflection on the internship. This reflection is an integral component of experiential learning and students’ overall career and professional development. The Career Services Center and designated Faculty Internship Advisor (FIA) from the student’s program provide support and guidance during the semester of participation. Career Services staff is also available to assist students with internship search strategy prior to the internship. At the conclusion of the internship semester, all students are evaluated by their employer and FIA, receiving a grade derived from successful performance as determined by the employer, the quality of academic assignments submitted to faculty and completion of minimum required hours. All internships, regardless of credit registration, are a minimum of twelve weeks in length.

Academic internships administered by Career Services are offered during the fall, spring and twelve-week summer semesters. The deadline to register for academic internships is the “last day to add” classes for the semester of intended participation, as established by the Registrar (refer to the Academic Calendar for specific deadlines). Students are strongly encouraged to discuss their internship interest as early as possible with their program director or academic advisor.

To learn more about academic internships administered by Career Services at Philadelphia University, visit [www.philau.edu/career](http://www.philau.edu/career).

- **Minimum requirements for participation:**

*Graduate:*

Full-time status

Completion of 18 core graduate credits by the start of the internship experience

3.25 cumulative GPA in the semester preceding the internship

*International:*

Meet criteria above as relevant

Determine if eligible for Curricular Practical Training (CPT) by contacting the office for International Student Programs

*Note: Students not meeting minimum requirements may be considered by submitting a formal appeal and should contact Career Services for further instructions.*

### **CREDIT BY EXAM (WAIVER EXAMINATIONS) - GRADUATE**

Students may request to take a waiver examination instead of taking a course. The student must have experience in the field covered by the course or must have studied it elsewhere. Students may take waiver examinations for up to two courses in their degree programs. Credits earned by a waiver examination are not considered transfer credits. The cost of taking a waiver examination is equivalent to one credit hour of the current graduate tuition. Consult with your program director for specific details.

### **CREDIT/NO CREDIT-GRADUATE**

Some graduate courses are graded on a "Credit/No Credit" (CR/NC) basis. To obtain credit for these courses, students must earn the equivalent of a "B-" or better in the course. The grade point average will not be affected whether credit is received for the course or not.

### **GRADING-GRADUATE**

The University uses a plus/minus grading system. The passing grades for graduate courses are "CR" "A" "B" and "C". A grade of "F" signifies that the course has been failed. The grade of "C" is the minimum passing grade, but is considered unsatisfactory performance.

A cumulative grade point average of 3.0 for all courses in the student's graduate program is required for graduation; this does not include foundation courses or undergraduate prerequisite courses. The unit of credit is the semester hour. A quality point average is used to determine scholastic standing. Quality points are assigned according to the following scale:

A	(4.0)	C+	(2.33)
A--	(3.67)	C	(2.0)
B+	(3.33)	C-	(1.67)
B	(3.0)	F	(0.0)
B-	(2.67)		

To calculate the grade point average for a given semester, divide the number of grade points awarded by the number of credits attempted. To calculate the cumulative grade point average, the total number of grade points awarded is divided by the total number of credits attempted in all courses taken at the University.

The "I" (Incomplete) grade is used to indicate that a student has missed some portion of the required work because of illness or other emergencies beyond their control. It indicates that the student will most probably complete the missing requirements within the prescribed time limit and, when they do, will probably receive a passing grade.\* If there is no possibility of passing the course, then it is inappropriate to assign an "I" grade. Both the student and faculty member assigning the grade must sign the "Agreement for the Completion of Work Outstanding." Copies of this form are available online on the Registrar's website, [www.PhilaU.edu/registrar/](http://www.PhilaU.edu/registrar/). An "I" grade automatically becomes an "F" (failure) unless removed within the first four weeks of the next semester, including summer sessions.



*\* In most cases, a passing grade for graduate courses is “C,” but there are courses and programmatic requirements that exceed this. Please refer to the appropriate graduate program and course descriptions in the Academic Catalog.*

## **GRADUATION REQUIREMENTS-GRADUATE**

To graduate, students must fulfill the credit-hour requirements and complete the required courses for their specific graduate program. To be certified for graduation, a candidate must have:

- a minimum 3.0 cumulative grade point average (excluding foundation courses and undergraduate prerequisite courses)
- no more than two grades below “B-” (including fundamental and undergraduate prerequisite courses)
- grades of “C” or better in WRTG-100ESL and READ-098ESL for those students who were required to complete these courses
- no “F” grades in courses within the student’s program

Students must also complete all requirements for the doctoral dissertation or the master’s thesis in programs that require them. See “Guide for the Preparation of Doctoral Dissertations and Master’s Theses” for further information (available online: <http://www.philau.edu/gradstudent/>).

Students must complete an Application for Graduation prior to the semester in which they plan to graduate. This form is available online on the Registrar’s website at [www.PhilaU.edu/registrar/](http://www.PhilaU.edu/registrar/). Students will be billed for graduation fees.

## **MATRICULATION MAINTENANCE**

In order to earn credit for the completion of the dissertation, thesis, capstone project or clinical experience, a student must be registered in the appropriate graduate program (either in residence or absentia) during the semester in which the course work is completed or the dissertation or theses are defended, and must be enrolled in the appropriate course.

If a student is capable of defending or presenting their work within the grace period (approximately four weeks into the next semester, including summer sessions\*), the grade of “Incomplete” will be awarded. Following successful completion and submission of course work, or in the case of thesis or dissertation, a final version of the dissertation or thesis, a change of grade will be submitted by the faculty of record. Students who fail to complete the requirements during the grace period must re-register for dissertation, thesis, capstone project or clinical experience until they successfully meet all requirements.

Students who are judged by the faculty, dissertation or thesis chair, or advisor to be incapable of completing the requirements during the grace period will receive the grade of “TH” (which indicates the course requirements have not been satisfactorily completed, but work is progressing).

In addition to being enrolled in the appropriate program, students must re-register in the original course for dissertation, thesis, capstone project or clinical experience coursework in the subsequent fall or spring semester immediately following the semester in which they enrolled to maintain continuous enrollment, and to remain in good standing\*\*. Tuition equal to one graduate credit will be assessed for subsequent courses in dissertation, thesis, capstone project and clinical experience.

When the dissertation, thesis, capstone project or clinical experience is successfully completed, the faculty, program director or advisor will submit a final grade for course completion and the student will earn one to nine graduate credits (depending on the major field) for the semester during which the dissertation, thesis, capstone project or clinical experience was successfully completed.

*\* The grace period ends on the date corresponding to when current semester “I” or incomplete grades are changed to “F” or failing in the subsequent semester; these are listed on the Academic Calendar which is available on the university website.*

*\*\* These courses will have an identical course number with an “e” indicating a matriculation extension.*

### **PROBATION AND DISMISSAL-GRADUATE**

Students’ academic records are reviewed at the end of each semester, including summer, to evaluate academic standing and satisfactory progress toward degree requirements.

**Probation** - Students whose academic records include one or more of the following will be placed on academic probation by their respective program directors:

Cumulative grade point average below 3.0 (excluding foundation courses and undergraduate prerequisite courses)

A grade below “B-” in two or more courses (including foundation courses and undergraduate prerequisite courses)

An outstanding grade of “F” in one or more courses within the student’s program

Students on academic probation will be required to correct the above deficiencies. When these deficiencies have been corrected, students will be removed from academic probation.

**Dismissal** - Students who fail to correct deficiencies outlined in their academic probation notices, students who fail to achieve a 3.0 cumulative grade point average and students who fail to repeat specified courses, including outstanding grades of “F” in courses in the student’s program, within a specified time period will be dismissed from their respective graduate programs.

### **REFUND POLICY-GRADUATE**

Students are considered in attendance until the Registrar receives formal written notice of withdrawal.

Tuition charges for Graduate students who withdraw from a course will be refunded on the following schedule (Including Summer):

100 percent prior to first class meeting,

80 percent prior to the second class meeting,

60 percent prior to the third class meeting,

40 percent prior to the fourth class meeting.

0 percent after fourth class meeting. No refund thereafter.

**Online Policy** (including Summer Online courses) regardless of login status:

100 Percent before classes start

80 percent during the first week of classes,

60 percent during the second week of classes,

40 percent during the third week of classes,

0 Percent beginning the fourth week of classes. No refund thereafter.

### **TIME RESTRICTION**

The maximum time for completion of the degree program is seven years from the date of first enrollment (four years for the midwifery master’s program and five years for the doctor of philosophy program). Students who have not earned the graduate degree during this period will have their academic records reviewed and may be asked to meet additional requirements in order to graduate.

### **TRANSFER CREDITS-GRADUATE**

A maximum of six credits may be transferred from another accredited graduate program to the student's proposed program of study. Exceptions to the six-credit maximum may be made by the program director for students studying abroad in University-approved graduate programs.

Transfer of credit is subject to the approval of the respective program director. No transfer credit will be accepted if the grade earned at another institution was less than a "B." **Please note** that if a course was used to satisfy the requirements of a completed degree, the credits cannot be used to satisfy the requirements of another degree.

Students wishing to transfer credits should be prepared to submit course outlines and texts used so that proper credit may be given. Students already enrolled in a degree program must have advanced permission from the respective program director to transfer courses.

### **TRANSFER TO A NEW DEGREE PROGRAM OR CONCENTRATION**

Students who have been admitted to a master's degree program at Philadelphia University and who wish to transfer to another degree program, or to change their concentration, must file a Change of Graduate Program Request form. The form is found online at the Learning and Advising webpage [www.philau.edu/learning/](http://www.philau.edu/learning/). The student's academic record will be reviewed by the director of the proposed new program. Approval or denial of the request will be sent to the student. An additional application fee is not required and, ordinarily, admissions credentials need not be resubmitted. Credits already earned in the original program may apply to the program if, in the opinion of the program director, they are appropriate to the new degree.

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B.S., Philadelphia University  
M.F.A., Savannah College of Art and Design

Charles David White, Assistant Professor, Sustainability

B.S.E., University of Michigan

M.S., Ph.D., University of California, Berkeley

Frank H. Wilkinson, Associate Professor, Biochemistry  
B.A., LaSalle University  
Ph.D., Temple University

Rachel M. Wilson, Associate Professor, Biology

B.S., M.S., Southern Connecticut State University  
Ph.D., University of Illinois

Harry W. Woodcock, Professor, Physics

A.B., La Salle University  
M.S., University of Pittsburgh  
Ph.D., Temple University

#### **EMERITI FACULTY**

Herbert J. Barndt  
Associate Professor Emeritus of Textile Engineering

Carl B. Bedell  
Associate Professor Emeritus of Mathematics

Stasia Brokaw  
Associate Professor Emeritus of Textiles

William Brokaw  
Associate Professor Emeritus of Economics

William R. Brown  
Professor Emeritus of English

Gultekin Celikiz  
Associate Professor Emeritus of Chemistry

Gary J. Crowell  
Dean and Professor Emeritus of Architecture

Marie P. Dohan  
Associate Professor Emeritus of Sociology

Wilfred A. Frisby  
Associate Professor Emeritus of Library

J. Cyril Furniss  
Dean Emeritus School of Textiles

John Gall  
Professor Emeritus of Chemistry

Nevil Gott  
Professor Emeritus of Textiles

Marylyn M. Goutmann  
Associate Professor Emeritus of Textiles

Stephen Grout  
Associate Professor Emeritus of Interior Design

Ann Lavee Hussein  
Assistant Professor Emeritus of Management

Morey Kaplan  
Associate Professor Emeritus of Chemistry

Russell Kleinbach  
Professor Emeritus of Sociology

Christian B. Kulczytzky  
Associate Professor Emeritus of English

Saul Lassoff  
Associate Professor Emeritus of Psychology

H. Lawrence Laupheimer  
Associate Professor Emeritus of Retailing

Gerald L. Marvin Jr.  
Assistant Professor Emeritus of Textiles

Paul J. Mattina  
Assistant Professor Emeritus of Textiles

Abigail Lee Miller  
Associate Professor Emeritus of Management Information Systems

Norman H. Nemeroff  
Professor Emeritus of Chemistry

Harry Pure  
Professor Emeritus of Physical Education

Joseph Rivlin  
Professor Emeritus of Textile Chemistry

Francis L. Scardino  
Professor Emeritus of Textiles

Lee L. Snyder  
Professor Emeritus of English

Joyce B. Storey  
Professor Emeritus of Textile Design

David F. Tierney  
Associate Professor Emeritus of Economics

Mendel Trachtman  
Professor Emeritus of Chemistry

J. Thomas Vogel  
Associate Professor Emeritus of Library

John D. Vorlicek  
Associate Professor Emeritus of Design

J. Robert Wagner  
Professor Emeritus of Textiles

Sigrid Weltge  
Professor Emeritus of Art History

Robert J. Wiley  
Professor Emeritus of Accounting and Finance

Jerome Witt  
Associate Professor Emeritus of Marketing

William Wolfgang  
Professor Emeritus of Textiles

Francis J. Zeglen  
Professor Emeritus of Textiles



# Academic Checksheets

Listed Alphabetically by College/School/ Program

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PHILADELPHIA UNIVERSITY  
5-Yr BACHELOR OF ARCHITECTURE

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
SCI-101	Science I: Environmental Science (Fall)		3	<input type="checkbox"/>	_____	_____
PHYS-101	Science II: General Physics (Spring)	(Quantitative Reasoning I)	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

		MATH-102	Pre-calculus (3 cr.)
		MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

<b>Fall</b>	ADFND-101	Design 1: Interdisc Foundation Studies		4	<input type="checkbox"/>	_____	_____
	DRAW-101	Drawing 1		3	<input type="checkbox"/>	_____	_____
<b>Spring</b>	ARCH-102	Design 2: Arch. Foundation Studies	(ADFND-101*)	4	<input type="checkbox"/>	_____	_____
	( )	Visualization Elective: (Select one from the following) ADFND-112, ADFND-104, INTD-106, ADFND-110, LARCH-203		3	<input type="checkbox"/>	_____	_____

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit <[www.philau.edu/oit](http://www.philau.edu/oit)> for hardware and software recommendations.

**LEVEL II (SECOND YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

AHIST-205	History 1: Blt Env, Anc/Medieval (Fall)	(WRTG-101/101G)	3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____

[WRTG-215 Writing Seminar II for Design recommended]

**Major Courses – 23 credits**

<b>Fall</b>	ARCH-201	Design 3: Arch. Foundation Studies	(ARCH-102*)	4	<input type="checkbox"/>	_____	_____
	ARCHDSN-210	Technology 1: Materials & Methods	(ARCH-102*)	3	<input type="checkbox"/>	_____	_____
	ARCHDSN-208	Vis. 1: Digital Modeling (Fall or Spring)	(ARCH-102*)	3	<input type="checkbox"/>	_____	_____
<b>Spring</b>	ARCH-202	Design 4: Arch. Foundation Studies	(ARCH-201*)	4	<input type="checkbox"/>	_____	_____
	ARCH-212	Technology 2: Passive Sys. Bldg. Enclos.	(ARCHDSN-210)	3	<input type="checkbox"/>	_____	_____
	AHIST-206	History 2: Renaissance/Baroque	(AHIST-205)	3	<input type="checkbox"/>	_____	_____
	ARCH-303	Structures 1	(MATH-103 or 111, PHYS-101)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - 36 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Major Courses – 30 credits**

Fall	ARCH-311	Design 5 for Architecture (Fall or Spring)	(5-yr BArch major; ARCH-202*, ARCH-212)	6	<input type="checkbox"/>		
	ARCH-313	Technology 3: Dynamic Env. Systems	(ARCH-212)	3	<input type="checkbox"/>		
	ARCH-304	Structures 2	(ARCH-303)	3	<input type="checkbox"/>		
Spring	AHIST-305	History 3: Early Modern-1750-1940	(AHIST-206)	3	<input type="checkbox"/>		
	ARCH-312	Design 6 for Architecture (Fall or Spring)	(5-yr BArch major; ARCH-202*, AHIST-212)	6	<input type="checkbox"/>		
	ARCH-326	Vis 2: Advanced Modeling (Fall or Spring)	(ARCHDSN-208)	3	<input type="checkbox"/>		
	AHIST-306	History 4: Mod/Contemporary	(AHIST-305)	3	<input type="checkbox"/>		
	ARCH-314	Technology 4: Adv. Bldg. Analysis	(ARCH-304, ARCH-313)	3	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR) - 33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

+	JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
+	JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
+	( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		

**Major Courses – 18 credits**

Fall	★ (ARCH-401)	Design 7 for Architecture (Fall or Spring)	(ARCH-311*, ARCH-312*)	6	<input type="checkbox"/>		
	Spring	ARCH-412	Design 8 for Architecture (Fall or Spring)	6	<input type="checkbox"/>		
	ARCH-416	Technology 5: Doc. and Det. (Fall or Spring)	(ARCH-314; ARCHDSN-208, ARCH-311*, ARCH-312*; co-requisite ARCH-416) (ARCH-326; co-req. ARCH-412)	3	<input type="checkbox"/>		

**Theory Seminar:** (Select one from the following) ARCH-320, ARCH-410, ARCH-341, ARCH-371, ARCH-422

( )		(Fall or Spring)	3	<input type="checkbox"/>			
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**Free Electives - 6 credits**

( )		(Fall or Spring)	3	<input type="checkbox"/>			
( )		(Fall or Spring)	3	<input type="checkbox"/>			

**LEVEL V (FIFTH YEAR) - 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

	COLLST-499	Contemporary Perspectives	(Humanities I, one course from AREST-2xx or Foreign Languages, & one Junior Seminar. May not be taken CR/NC)	4	<input type="checkbox"/>		
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**Major Courses – 15 credits**

Fall	ARCH-507	Design 9 for Architecture	(ARCH-412*; Theory Seminar)	6	<input type="checkbox"/>		
	ARCH-503	Professional Management (Fall or Spring)	(ARCH-311*; ARCH-312* or LARCH-302*)	3	<input type="checkbox"/>		
Spring	ARCH-508	Design 10 for Architecture	(ARCH-507*)	6	<input type="checkbox"/>		

**Free Electives - 12 credits**

( )		(Fall)	3	<input type="checkbox"/>			
( )		(Fall)	3	<input type="checkbox"/>			
( )		(Spring)	3	<input type="checkbox"/>			
( )		(Spring)	3	<input type="checkbox"/>			

**TOTAL CREDITS: 165-167 credits**

- \* A grade of "C" or better is required to advance from one design studio into the next, Design 1 through Design 10.
- ★ Must be a study abroad, interdisciplinary, or design-build studio or a studio course from another Design program.
- + Credits for this course may be earned through the Study Abroad (STUAB-300).

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>			
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>			

Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES**  
 Architectural Design Technology Concentration

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
SCI-101	Science I: Environmental Science (Fall)	3	<input type="checkbox"/>	_____	_____
PHYS-101	Science II: General Physics (Spring) <span style="float: right;">(Quantitative Reasoning I)</span>	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II (select below) or Free Elective (ACCT 101 Reccom'd)	3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

	MATH-102	Pre-calculus (3 cr.)	
	MATH-111	Calculus I (4 cr.)	
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

Fall	ADFND-101	Design 1: Interdisc Foundation Studies	4	<input type="checkbox"/>	_____	_____		
	DRAW-101	Drawing I	3	<input type="checkbox"/>	_____	_____		
Spring	ARCH-102	Design 2: Foundation Studies <span style="float: right;">(ADFND-101*)</span>	4	<input type="checkbox"/>	_____	_____		
	<b>Drawing II-Visualization Elective:</b> (Select one from the following) ADFND-112, ADFND-104, INTD-106, ADFND-110, LARCH-203					3	<input type="checkbox"/>	_____
	( )		3	<input type="checkbox"/>	_____	_____		

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit <[www.philau.edu/oit](http://www.philau.edu/oit)> for hardware and software recommendations.

**LEVEL II (SECOND YEAR) – 32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

AHIST-205	History 1: Bit Env, Anc/Medieval (Fall) <span style="float: right;">(WRTG-101/101G)</span>	3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>	_____	_____

[WRTG-215 Writing Seminar II for Design recommended]

**Major Courses – 23 credits**

Fall	ARCH-201	Design 3: Arch. Foundation Studies <span style="float: right;">(C or better in ADFND-102)</span>	4	<input type="checkbox"/>	_____	_____
	ARCHDSN-210	Technology 1: Materials & Methods <span style="float: right;">(C or better in ADFND-102)</span>	3	<input type="checkbox"/>	_____	_____
	ARCHDSN-208	Visualization 1: Digital Modeling (Fall or Spring) <span style="float: right;">(C or better in ADFND-102)</span>	3	<input type="checkbox"/>	_____	_____
Spring	ARCH-202	Design 4: Arch. Foundation Studies <span style="float: right;">(C or better in ADFND-102)</span>	4	<input type="checkbox"/>	_____	_____
	ARCH-212	Technology 2 <span style="float: right;">(ARCHDSN-210)</span>	3	<input type="checkbox"/>	_____	_____
	AHIST-206	History 2: Renaissance/Baroque <span style="float: right;">(AHIST-205)</span>	3	<input type="checkbox"/>	_____	_____
	ARCH-303	Structures 1 <span style="float: right;">(MATH-103 or 111, PHYS-101)</span>	3	<input type="checkbox"/>	_____	_____

BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES (2012-2013)

Architectural Design Technology Concentration - [Page 2]

LEVEL III (THIRD YEAR) - 33 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

College Studies Courses – 9 credits

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		

Major Courses – 21 credits

Fall	LARCH-310	GIS for Landscape Arch. (Fall or Spring)		3	<input type="checkbox"/>	
	ARCH-313	Technology 3	(ARCH-212)	3	<input type="checkbox"/>	
	ARCH-304	Structures 2	(ARCH-303)	3	<input type="checkbox"/>	
	AHIST-305	History 3: Early Modern-1750-1940	(AHIST-206)	3	<input type="checkbox"/>	
Spring	ACCT 101	Financial Accounting (Fall or Spring)		3	<input type="checkbox"/>	
	ARCH-314	Technology 4	(ARCH 313)	3	<input type="checkbox"/>	
	AHIST-306	History 4: Mod/Contemporary	(AHIST-305)	3	<input type="checkbox"/>	

Free Electives - 3 credits

( )		(Fall or Spring)		3	<input type="checkbox"/>	
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LEVEL IV (FOURTH YEAR) - 31 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

College Studies Courses – 10 credits

JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		

(Humanities I, one Language/Area Studies, one Junior Seminar)

Major Courses – 12 credits

ARCH-503	Professional Management		3	<input type="checkbox"/>		
ARCH-416	Technology 5 (BIM)	(ARCH 413)	3	<input type="checkbox"/>		
LARCH 515 (or SAIM)	Advanced GIS	(LARCH 310)	3	<input type="checkbox"/>		
BLAW 301	Business Law 1		3	<input type="checkbox"/>		

Free Electives - 9 credits

( )		See chart below for recommended electives for focus areas		3	<input type="checkbox"/>	
( )		(Fall or Spring)		3	<input type="checkbox"/>	
( )		(Fall or Spring)		3	<input type="checkbox"/>	
( )		(Fall or Spring)		3	<input type="checkbox"/>	

TOTAL CREDITS: 129-131

Elective Focus	Recommended Courses
Const. Management	CMGT 102, CMGT 104
Building Technology	ARCH 413, ARCH 414, ARCH 426
Sustainability	SUST 204, SUST 300
Business	MKTG 102, ECON 205, ECON 206, FINC 301, MGMT 301, MGMT 310

<b>Fundamentals Courses:</b> (Fundamental "099" courses do <b>not</b> count toward graduation requirements. However, WRTG-100 <b>can</b> be used toward graduation credits....as a free elective.)						
MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

COURSE STATUS:  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES**  
 Historic Preservation Concentration

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
SCI-101	Science I: Environmental Science (Fall)	3	<input type="checkbox"/>		
PHYS-101	Science II: General Physics (Spring) <span style="float: right;"><i>(Quantitative Reasoning I)</i></span>	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II (select below) <i>OR</i> Free Elective (ACCT 101 Reccom'd)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

	MATH-102 Pre-calculus (3 cr.)
	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

<b>Fall</b>	ADFND-101	Design 1: Interdisc Foundation Studies	4	<input type="checkbox"/>	
	DRAW-101	Drawing I	3	<input type="checkbox"/>	
<b>Spring</b>	ARCH-102	Design 2: Foundation Studies <span style="float: right;"><i>(C or better in ADFND-101)</i></span>	4	<input type="checkbox"/>	
	INTD-106	Technical Drawing and Graphic <span style="float: right;"><i>(DRAW-101 &amp; ADFND-101)</i></span>	3	<input type="checkbox"/>	

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit [www.philau.edu/oit](http://www.philau.edu/oit) for hardware and software recommendations.

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

AHIST-205	History 1: Blt Env, Anc/Medieval (Fall) <span style="float: right;"><i>(WRTG-101/101G)</i></span>	3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;"><i>(WRTG-101/101G, HIST-114 for Area Studies only)</i></span>	3	<input type="checkbox"/>		

**Major Courses – 18 credits**

<b>Fall</b>	EDVS-221	Intro to Historic Preservation <span style="float: right;"><i>(ADFND-102 or INTD-102 or LARCH-102)</i></span>	3	<input type="checkbox"/>	
	EDVS-266	Preservation Technology 1 <span style="float: right;"><i>(ADFND-102 or INTD-102 or LARCH-102)</i></span>	3	<input type="checkbox"/>	
	ARCHDSN-208	Visualization I: Digital Modeling <span style="float: right;"><i>(C or better in ADFND-102)</i></span>	3	<input type="checkbox"/>	
<b>Spring</b>	EDVS-2XX	Preservation Technology 2 <span style="float: right;"><i>(EDVS-221, EDVS-266)</i></span>	3	<input type="checkbox"/>	
	PHOTO-436	HP Documentation: Photography <span style="float: right;"><i>(PHOTO-101 or PHOTO-204 or PHOTO-302)</i></span>	3	<input type="checkbox"/>	
	AHIST-206	History 2: Renaissance/Baroque <span style="float: right;"><i>(AHIST-205)</i></span>	3	<input type="checkbox"/>	

BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES (2012-2013)  
 Historic Preservation Concentration - [Page 2]

**LEVEL III (THIRD YEAR) - 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

	JSLA/JSINT-3( ) Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
	JSLA/JSINT-3( ) Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
	( ) Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			
	( ) Language or Area Studies	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			

**Major Courses – 18 credits**

Fall	EDVS-324	HP Documentation: Drawing	(ARCHDSN-208))	3	<input type="checkbox"/>		
	AHIST-305	History 3: Early Modern Arch & Interiors	(AHIST-206)	3	<input type="checkbox"/>		
	EDVS-3xx	Architectural Forensics	(EDVS-2xx Pres Tech 2 or permission)	3	<input type="checkbox"/>		
Spring	EDVS-320	Archival Research for Historic Preservation	(EDVS-221)	3	<input type="checkbox"/>		
	UARC-3xx	Historic Preservation Seminar (Rome) or Free Elective	(AHIST-305)	3	<input type="checkbox"/>		
	UARC-3xx	History and Theory of Urban Forms (Rome) or Free Elective		3	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR R) 33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

	COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		
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*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Major Courses – 29 credits**

Fall	EDVS-428	Restoration/Rehabilitation Interiors	(AHIST-305 or LARCH-307)	3	<input type="checkbox"/>		
	EDVS-341	American Architecture	(AHIST-206 or LARCH-206)	3	<input type="checkbox"/>		
Spring	( )	Internship or Free Elective	(permission of director)	3	<input type="checkbox"/>		
	EDAVS-4XX	Capstone Studio 1: Macro	(permission of director)	4	<input type="checkbox"/>		
	EDVS-4XX	Theories of Preservation Seminar	(EDVS-221 Intro to HP)	3	<input type="checkbox"/>		
	AHIST-306	History 4: Modern/Contemporary	(AHIST-305)	3	<input type="checkbox"/>		
	EDVS-4xx	Capstone Studio 2: Micro	(INTD-106 or EDVS324 or permission of director)	4	<input type="checkbox"/>		
	EDVS-4xx	Cultural Site Management	(EDVS-221)	3	<input type="checkbox"/>		
	( )	Internship or Free Elective	(permission of director)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 125-127**

Recommended Electives	
EDVS-300	Exhibition Design and Planning
LARCH-507	Cultural and Landscape Preservation
UARC-3xx	Historic Preservation Seminar (Rome)
UARC-3xx	History and Theory of Urban Forms (Rome)
INTRN-493	Internship

Fundamentals Courses:		(Fundamental "099" courses do <b>not</b> count toward graduation requirements. However, WRTG-100 <b>can</b> be used toward graduation credits....as a free elective.)	
MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3 <input type="checkbox"/>
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3 <input type="checkbox"/>

Please note Philadelphia University residency requirement:  
 Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES**  
 Photography & New Media Concentration

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
SCI-101	Science I: Environmental Science (Fall)	3	<input type="checkbox"/>		
PHYS-101	Science II: General Physics (Spring) <span style="float: right;"><i>(Quantitative Reasoning I)</i></span>	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II (select below) <i>or</i> Free Elective (ACCT 101 Reccom'd)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

	MATH-102 Pre-calculus (3 cr.)
	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education...OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

<b>Fall</b>	ADFND-101	Design 1: Interdisc Foundation Studies	4	<input type="checkbox"/>	
	DRAW-101	Drawing I	3	<input type="checkbox"/>	
<b>Spring</b>	ARCH-102	Design 2: Foundation Studies <span style="float: right;"><i>(C or better in ADFND-101)</i></span>	4	<input type="checkbox"/>	
	( )	<b>Drawing II-Visualization Elective:</b> (Select one from the following) ADFND-112, ADFND-104, INTD-106, ADFND-110, LARCH-203	3	<input type="checkbox"/>	

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit <[www.philau.edu/oit](http://www.philau.edu/oit)> for hardware and software recommendations.

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

AHIST-205	History 1: Bit Env, Anc/Medieval (Fall) <span style="float: right;"><i>(WRTG-101/101G)</i></span>	3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;"><i>(WRTG-101/101G, HIST-114 for Area Studies only)</i></span>	3	<input type="checkbox"/>		

**Major Courses – 18 credits**

<b>Fall</b>	PHOTO-101	Intro to Photography: Black & White	3	<input type="checkbox"/>	
	PHOTO-102	Intro to Photography: Digital	3	<input type="checkbox"/>	
	ARCHDSN-208	Visualization I: Digital Modeling <span style="float: right;"><i>(C or better in ADFND-102)</i></span>	3	<input type="checkbox"/>	
<b>Spring</b>	PHOTO-201	Studio Photography <span style="float: right;"><i>(PHOTO-101 or PHOTO-102 or PHOTO-204)</i></span>	3	<input type="checkbox"/>	
	PHOTO-302	Architectural Photography	3	<input type="checkbox"/>	
	ARTH-102	History of Western Art	3	<input type="checkbox"/>	



BACHELOR OF SCIENCE: ARCHITECTURAL STUDIES (2012-2013)

Photography & New Media Concentration - [Page 2]

**LEVEL III (THIRD YEAR) - 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			

**Major Courses 21 credits**

<b>Fall</b>	PHOTO-303	Introduction to the View Camera	(PHOTO-101 or PHOTO-204 or PHOTO-302)	3	<input type="checkbox"/>		
	PHOTO-307	History of Photography	(WRTG-2XX)	3	<input type="checkbox"/>		
<b>Spring</b>	PHOTO-436	Historic Preservation Photography	(ARCH-421 or PHOTO-101 or PHOTO 204)	3	<input type="checkbox"/>		
	PHOTO-3xx	Issues in Contemporary Photography	(WRTG-2XX)	3	<input type="checkbox"/>		
	EDVS 300	Exhibition Design & Planning		3	<input type="checkbox"/>		
	( )	Free Elective	(ADFND-102 or INTD-102 or LARCH 102 or DSGNFND-203 or INDD-102)	3	<input type="checkbox"/>		
	( )	Free Elective		3	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR) - 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>			
COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>			

(Humanities I, one Language/Area Studies, one Junior Seminar)

**Major Courses – 24 credits**

<b>Fall</b>		Documentary Photography	(PHOTO 303 or PHOTO 201)	3	<input type="checkbox"/>		
	ARCHDSN-493	Internship or Free elective	(permission of Director)	3	<input type="checkbox"/>		
	( )	Free Elective		3	<input type="checkbox"/>		
	( )	Free Elective		3	<input type="checkbox"/>		
<b>Spring</b>	PHOTO-4XX	Theories of Photography Seminar	(PHOTO-307 or PHOTO-3xx Issues )	3	<input type="checkbox"/>		
	PHOTO-4XX	Photography Capstone	(BS ARCST or permission of Director)	3	<input type="checkbox"/>		
	PHOTO-4XX	Professional Practic;; Photography	(BS ARCST or permission of Director)	3	<input type="checkbox"/>		
	ARCHDSN-493	Internship or Free Elective	(permission of Director)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 124-26**

**Recommended Electives**

- PHOTO-381 Independent Study in Photography
- INTRN-493 Photography Internship

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

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**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WR TG-101/101G	Writing Seminar I		3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>		
SCI-101	Science I: Environmental Science (Fall)		3	<input type="checkbox"/>		
PHYS-101	Science II: General Physics (Spring)	(Quantitative Reasoning I)	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>		

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

		MATH-102	Pre-calculus (3 cr.)
		MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>		
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>		

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 12 credits**

Fall	CMGT-101	Construction Graphics		3	<input type="checkbox"/>	
	CMGT-102	Introduction to the Construction Industry		3	<input type="checkbox"/>	
Spring	CMGT-104	Introduction to Construction Management	(CMGT 102)	3	<input type="checkbox"/>	
	ACCT-101	Financial Accounting		3	<input type="checkbox"/>	

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit <[www.philau.edu/oit](http://www.philau.edu/oit)> for hardware and software recommendations.

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

ARCH-204	Arts & Culture: Great Buildings (Spring)	(WR TG-101/101G)	3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>		
WR TG-2( )	Writing Seminar II	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>		
( )	Language or Area Studies (Fall)	(WR TG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		

**Major Courses – 18 credits**

Fall	CMGT-200	Construction Project Planning and Scheduling	CMGT-104	3	<input type="checkbox"/>	
	ARCHDSN-210	Technology I: Materials & Methods	(ADFND-102*)	3	<input type="checkbox"/>	
	STAT-201	Statistics for Business I	(Quantitative Reasoning I)	3	<input type="checkbox"/>	
Spring	ARCH-303	Structures I		3	<input type="checkbox"/>	
	ARCH-212	Technology 2	(ARCHDSN-210)	3	<input type="checkbox"/>	
	CMGT-202	Construction Cost Estimating and Budgeting	(CMGT-104)	3	<input type="checkbox"/>	

**LEVEL III (THIRD YEAR) - 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses - 12 credits**

( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
+ JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I, Writing II)	3	<input type="checkbox"/>		
+ JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I, Writing II)	3	<input type="checkbox"/>		
( )	Language or Area Studies (Fall)	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		

**Major Courses - 21 credits**

Fall	CMGT-302	Construction Contract Administration	(CMGT-104)	3	<input type="checkbox"/>	
	CMGT-300	Construction Accounting and Cost Control	(CMGT-202 and ACCT-101)	3	<input type="checkbox"/>	
	ECON-205 or 206	Macroeconomics or Microeconomics		3	<input type="checkbox"/>	
Spring	CMGT-3XX	Surveying	(CMGT-104)	3	<input type="checkbox"/>	
	CMGT-3XX	Construction Safety	(CMGT-104)	3	<input type="checkbox"/>	
	BLAW-301	Business Law		3	<input type="checkbox"/>	

Summer Construction Management students are encouraged to participate in a summer internship relative to the field

**LEVEL IV (FOURTH YEAR) - 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses - 4 credits**

COLLST-499	Contemporary Perspectives	(Humanities I, one Language/Area Studies, one Junior Seminar)	4	<input type="checkbox"/>		
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**Major Courses - 16 credits**

Fall	CMGT-4XX (Designated CMGT Elective)	(Completion of at least 24 credit hours of CMGT courses)	3	<input type="checkbox"/>		
	CMGT-4XX (Designated CMGT Elective)	(Completion of at least 24 credit hours of CMGT courses)	3	<input type="checkbox"/>		
	CMGT-4XX	Construction Project Management Seminar	(CMGT3XX Contracts & CMGT3XX Acctg/Cost)	3	<input type="checkbox"/>	
	FINC - 301	Financial Management	(ACCT-101, STAT-201 or MATH-101)	3	<input type="checkbox"/>	
Spring	ARCH-499	Construction Management Capstone	(Completion of at least 24 credit hours of CMGT courses)	4	<input type="checkbox"/>	

**Business Electives - 6 credits**

( )			3	<input type="checkbox"/>		
( )			3	<input type="checkbox"/>		

**Free Electives - 6 credits**

( )			3	<input type="checkbox"/>		
( )			3	<input type="checkbox"/>		

**TOTAL CREDITS: 123-125**

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits - 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

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**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: INTERIOR DESIGN

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Science I	3	<input type="checkbox"/>		
PHYS-101	Science II: General Physics (Spring) <span style="float: right;"><i>(Quantitative Reasoning I)</i></span>	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101 Finite Mathematics (3cr.)	MATH-102 Pre-calculus (3 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit** (select one, 1 credit option below)

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

<b>Fall</b>	ADFND-101	Design 1: Interdisciplinary Foundation Studies	4	<input type="checkbox"/>	
	DRAW-101	Drawing I	3	<input type="checkbox"/>	
<b>Spring</b>	INTD-102	Design 2: Interior Design <span style="float: right;"><i>(ADFND-101*)</i></span>	4	<input type="checkbox"/>	
	INTD-106	Technical Drawing & Graphic Repr. <span style="float: right;"><i>(ADFND-101, DRAW-101)</i></span>	3	<input type="checkbox"/>	

The School of Architecture requires the purchase of a laptop computer before entering the second year of this program. The University bookstore makes every effort to offer the lowest possible prices of the required software for coursework. Visit <[www.philau.edu/oit](http://www.philau.edu/oit)> for hardware and software recommendations.

**College Studies Courses – 12 credits**

AHIST-205	History 1: Bit Env, Anc/Medieval (Fall) <span style="float: right;"><i>(WRTG-101)</i></span>	3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;"><i>(WRTG-101/101G, HIST-114 for Area Studies only)</i></span>	3	<input type="checkbox"/>		

**Major Courses – 20 credits**

<b>Fall</b>	INTD-201	Design 3 for Interior Design <span style="float: right;"><i>(INTD-102*, INTD-106*)</i></span>	4	<input type="checkbox"/>	
	ARCHDSN-208	Visualization 1: Digital Modeling (Fall or Spring)	3	<input type="checkbox"/>	
	ARCHDSN-210	Technology 1: Materials & Methods <span style="float: right;"><i>(INTD-102*)</i></span>	3	<input type="checkbox"/>	
<b>Spring</b>	INTD-202	Design 4 for Interior Design <span style="float: right;"><i>(INTD-201*)</i></span>	4	<input type="checkbox"/>	
	INTD-206	Interior Building Technology <span style="float: right;"><i>(ARCHDSN-210, INTD-201)</i></span>	3	<input type="checkbox"/>	
	AHIST-206	History 2: Renaissance/Baroque <span style="float: right;"><i>(AHIST-205)</i></span>	3	<input type="checkbox"/>	

**LEVEL III (THIRD YEAR) - 36.5 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
JSINT-360	Jr. Sem: Human Behavior/Physical Env <span style="float: right;"><i>(Soc Sci I and Writing II)</i></span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;"><i>(WRTG-101/101G, HIST-114 for Area Studies only)</i></span>	3	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR)** (continued) (Prerequisite) Cr Sem. Grade TR Equiv.

**Major Courses – 27.5 credits**

Fall	INTD-301	Design 5 for Interior Design	(INTD-202*)	6	<input type="checkbox"/>		
	INTD-305	Interior Building Systems (Fall or Spring)	(INTD-206, INTD-202)	3	<input type="checkbox"/>		
	AHIST-305	History 3: Early Modern (1750-1930)	(AHIST-206)	3	<input type="checkbox"/>		
	INTD-304	Integrated Community Service	(INTD-202)	.5	<input type="checkbox"/>		
<i>Integrated Community Service can be taken during the Fall or Spring of the 3rd or 4th year in Interior Design (.5 credit)</i>							
Spring	INTD-302	Design 6 for Interior Design	(INTD-301*)	6	<input type="checkbox"/>		
	INTD-310	Textile & Materials for Interiors & Architecture		3	<input type="checkbox"/>		
	INTD-308	CAD 2 for Interior Design	(INTD-206, INTD-202, ARCHDSN-208)	3	<input type="checkbox"/>		
	AHIST-306	History 4: Modern to Contemporary	(AHIST-305)	3	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR) - 36 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		

*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Major Courses – 20 credits**

Fall	INTD-401	Design 7 for Interior Design	(INTD-302*)	6	<input type="checkbox"/>		
	INTD-487	Capstone Research & Programming	(INTD-302*)	3	<input type="checkbox"/>		
Spring	INTD-488	Capstone Project for INTD	(INTD-401*, INTD-487*)	6	<input type="checkbox"/>		
	INTD-412	Professional Practice & Contract Design	(INTD-206, INTD-302*)	2	<input type="checkbox"/>		
<b>Designated INTD Elective</b> (Approved by the Academic Advisor & Program Director)							
( )				3	<input type="checkbox"/>		

**Free Electives - 9 credits**

( )		(Fall)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 137.5 - 139.5 credits**

\* A grade of "C" or better is required to advance from one design studio into the next, Design 1 to Design 7, Capstone, & Capstone Research & Programming

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits...as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must ear	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

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PHILADELPHIA UNIVERSITY  
4-Yr BACHELOR OF LANDSCAPE ARCHITECTURE

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-19 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
BIOL-101	Science I: Topics in Biology (Botany) (Spring)	3	<input type="checkbox"/>	_____	_____
SCI-110	Science II: Landscape Ecology (Fall)	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	( )	Free Elective (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)		
( )	Free Elective (3 cr.)		

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 14 credits**

<b>Fall</b>	ADFND-101	Foundation Design 1	4	<input type="checkbox"/>	_____
	LARCH-203	Landscape Architecture Graphics	3	<input type="checkbox"/>	_____
<i>All first-semester LA students must attend the Thursday night Landscape Architecture lecture series.</i>					
<b>Spring</b>	LARCH-102	LA Foundation Design 2 (ADFND-101*)	4	<input type="checkbox"/>	_____
	ECBIO-207	Soils	3	<input type="checkbox"/>	_____

**LEVEL II (SECOND YEAR) – 35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____
( )	Language I or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____
HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)		<input type="checkbox"/>	_____
LARCH-206	Landscape Architecture History I (Spring)	(Arts & Cultures course; WRTG-101/101G)	3	<input type="checkbox"/>	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____

[WRTG-217 Writing Seminar II for Science recommended]

**Major Courses – 20 credits**

<b>Fall</b>	LARCH-201	LA Design 3: Site Design (LARCH-102*)	4	<input type="checkbox"/>	_____
	ECBIO-208	Local Flora (BIOL-101)	4	<input type="checkbox"/>	_____
	* LARCH-207	LA Tech: Grading (LARCH-102)	3	<input type="checkbox"/>	_____
<b>Spring</b>	LARCH-300	LA Design 4: Urban Design I (LARCH-207, LARCH-201*)	6	<input type="checkbox"/>	_____
	LARCH-310	GIS for Landscape Analysis (LARCH-201 or ECBIO-301)	3	<input type="checkbox"/>	_____

**LEVEL III (THIRD YEAR) - 36 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____
JSINT-360	Hum. Behav. & Physical Env. (required Jr Seminar)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____
( )	Language I or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____

**Major Courses – 30 credits**

<b>Fall</b>	LARCH-304	LA Design 5: Community Design (LARCH-204*)	6	<input type="checkbox"/>	_____
	LARCH-307	LA Hist. II (LARCH-206 or AHIST-205)	3	<input type="checkbox"/>	_____
	LARCH-303	LA Tech: Advanced Grading (LARCH-207)	3	<input type="checkbox"/>	_____
	LARCH-305	Plant Community Ecology (SCI-110, ECBIO-208)	3	<input type="checkbox"/>	_____
<b>Spring</b>	LARCH-400	LA Design 6: Urban Rest. Mgmt. (LARCH-204*)	6	<input type="checkbox"/>	_____
	LARCH-412	Urban Hydrology (LARCH-303)	3	<input type="checkbox"/>	_____
	LARCH-409	LA Tech: Materials & Methods (LARCH-201 or 202, LARCH-207)	3	<input type="checkbox"/>	_____



PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ACCELERATED DEGREE PROGRAMS**  
 CONTINUING STUDIES

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**Specific Course Requirements** (This section should be completed within one year of beginning the program)

Course competency	Course Title / Institution / Grade	Completion Date	Credits
<input type="checkbox"/> Writing	_____	_____	_____
<input type="checkbox"/> Math	_____	_____	_____
<input type="checkbox"/> Science	_____	_____	_____
<input type="checkbox"/> History	_____	_____	_____
<input type="checkbox"/> Social Science	_____	_____	_____
<input type="checkbox"/> Humanities	_____	_____	_____
<input type="checkbox"/> Information Systems	_____	_____	_____

**Additional courses to reach 60 credit total**

Course Number/Title	Institution / Grade	Completion Date	Credits
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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_____	_____	_____	_____
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_____	_____	_____	_____

❖ GENERAL EDUCATION CORE - 15 credits		Cr	Sem.	Grade	TR Equiv.
HIST-321	Business, Industry & Work in American History	3	<input type="checkbox"/>	_____	_____
HUMN-310	Globalization & World Politics	3	<input type="checkbox"/>	_____	_____
SOC-310	The Social Science of the Workplace	3	<input type="checkbox"/>	_____	_____
COMM-320	Professional Communication Skills	3	<input type="checkbox"/>	_____	_____
◆ CSSEM-499	Professional Studies Capstone Seminar	3	<input type="checkbox"/>	_____	_____

❖ CONTINUING PROFESSIONAL STUDIES CORE -18 credits		Cr	Sem.	Grade	TR Equiv.
★ CSSEM-300	Professional Practice Seminar	3	<input type="checkbox"/>	_____	_____
MGMT-361	Leadership Theory & Ethical Practices	3	<input type="checkbox"/>	_____	_____
ECON-331	Economic Decision Making	3	<input type="checkbox"/>	_____	_____
STAT-311	Finding & Evaluating Statistical Data	3	<input type="checkbox"/>	_____	_____
FINC-323	Financial Decision Making (Prerequisite: STAT-311)	3	<input type="checkbox"/>	_____	_____
IT-201	Learning with Technology	3	<input type="checkbox"/>	_____	_____

- ❖ Minimum of 9 credits must be completed at Philadelphia University
- ★ Indicates course that must be completed as one of the **first** 3 courses taken at Philadelphia University
- ◆ Indicates course that must be completed as one of the **final** 3 courses taken at Philadelphia University; must be completed at Philadelphia University

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed



**MAJOR CONCENTRATION - 15 - 18 credits** (Select one from the list below)

Cr Sem. Grade TR Equiv.

* ( )	3	<input type="checkbox"/>		
* ( )	3	<input type="checkbox"/>		
* ( )	3	<input type="checkbox"/>		
* ( )	3	<input type="checkbox"/>		
* ( )	3	<input type="checkbox"/>		

\* Minimum of 12 credits must be completed at Philadelphia University

<p align="center"><b>Behavioral &amp; Health Services - take five of the following</b> (Intro to Psychology is prerequisite)</p> <p>PSYCH-201 Abnormal Psychology                  PSYCH-213 Developmental Psychology                  PSYCH-222 Counseling Psychology                  PSYCH-233 Interpersonal Relations &amp; Small Group Dynamics                  BEHLT-341 Behavioral Health &amp; Neurorehabilitation                  BEHLT-499 Applied Project in Behavioral Health &amp; Neurorehabilitation                  (Prerequisites: all CPS core courses)</p> <hr/> <p align="center"><b>Health Sciences</b></p> <p>Students interested in majoring in Health Sciences should refer to the separate official check sheet for this major.</p> <p>HRM-350 Cross-Cultural Comm &amp; Diversity Management                  HLTSV-310 Survey of Health Services Delivery Systems                  HLTSV-315 Public Policy &amp; Planning in Healthcare                  HLTSV-325 Emerging Issues in Health Care                  HLTSV-499 Capstone Seminar in HSM                  (Prerequisites: HRM-350, HLTSV-310, HLTSV-315, HLTSV-325)</p> <hr/> <p align="center"><b>Human Resource Management</b></p> <p>MGMT-320 Human Resource Management                  HRM-321 Staffing &amp; Resource Development (Prerequisite: MGMT-320)                  HRM-336 Compensation, Benefits, &amp; Health &amp; Safety (Prereq: MGMT-320)                  HRM-421 Organizational &amp; Employee Relations (Prerequisite: MGMT-320)                  HRM-499 Applied Research &amp; Practice in HRM                  (Prerequisites: MGMT-320, HRM-321, HRM-336, HRM-421)</p> <hr/> <p align="center"><b>Information Technology</b></p> <p>IT-315 Information Technology I                  IT-317 Information Technology II (Prerequisite: IT-315)                  IT-320 Database Management (Prerequisites: IT-315, IT-317)                  IT-410 IT Needs Assessment (Prerequisites: IT-315, IT-317, IT-320)                  IT-499 Project Management (Prerequisites: IT-315, IT-317, IT-320, IT-410)</p>	<p align="center"><b>Law Enforcement Leadership</b></p> <p>MGMT-320 Human Resource Management                  LAWEN-301 Planning for Law Enforcement Organizations                  LAWEN-310 Contemporary Law Enforcement Strategies                  LAWEN-410 Advanced Law Enf Theory &amp; Mngt (prereq: LAWEN-310)                  LAWEN-499 Capstone Seminar &amp; Applied Project in LEL                  (Prerequisites: MGMT-320, LAWEN-301, LAWEN-310, LAWEN-410)</p> <hr/> <p align="center"><b>Leadership in Emergency Services</b></p> <p>EMS-310 Emergency Services Law                  EMS-320 Emergency Management Planning                  EMS-330 Public Health Issues Impacting Emergency Services                  EMS-410 Disaster Response &amp; Recovery Planning                  EMS-499 Theoretical Applications &amp; Applied Project in ESL                  (Prerequisites: EMS-310, EMS-320, EMS-410)</p> <hr/> <p align="center"><b>Leadership in Homeland Security</b></p> <p>LHS-350 The Foundations of Homeland Defense and Security                  LHS-360 Unconventional Conflict                  LHS-403 Critical Infrastructure: Vulnerability Analysis and Protection                  LHS-xxx Disaster Policy and Politics                  LHS-xxx Command and Control                  LHS-xxx Capstone Seminar &amp; Applied Project in LSH</p> <hr/> <p align="center"><b>Organizational Leadership</b></p> <p>COMM-310 Communication Theory &amp; Practice                  MKTG-320 Visual Literacy                  HRM-350 Cross-Cultural Comm &amp; Diversity Management                  PSYCH-233 Interpersonal Relations &amp; Small Group Dynamics                  ( ) OL Elective</p> <hr/> <p align="center"><b>Pre-MBA</b></p> <p>MGMT-401 Operations Management (Prerequisite: STAT-311)                  MKTG-102 Principles of Marketing                  ACCT-101 Financial Accounting                  ACCT-102 Managerial Accounting                  BUS-499 Business Capstone Seminar                  (Prerequisites: MGMT-401, MKTG-102, ACCT-101, ACCT-102)</p>
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**FREE ELECTIVES - 9 - 12 credits**

Cr Sem. Grade TR Equiv.

( )	3	<input type="checkbox"/>		
( )	3	<input type="checkbox"/>		
( )	3	<input type="checkbox"/>		
( )	3	<input type="checkbox"/>		

**TOTAL CREDITS: 120 credits**

*Pre-MBA* students may choose to take MBA-625 Management Communications & Negotiations and MBA-628 Accounting for Management Decisions as Free Electives, which are graduate-level business core courses in the MBA program. Students must be accepted into the MBA program before registering for these courses and they may only begin taking these courses in their senior year.

Philadelphia University Continuing Studies students must complete a minimum of 33 credits at the University. 12 of those credits must be within the Major Core; 9 credits must be within the Continuing Professional Studies Core including credits from CSSEM-300 Professional Practice Seminar in order to be eligible for a B.S. degree. CSSEM-499 must be completed at Philadelphia University. This document should be used as a worksheet in conjunction with the University catalog. Please refer to the Philadelphia University catalog (<[www.philau.edu/catalog](http://www.philau.edu/catalog)>) for questions regarding curriculum and University policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed





Name \_\_\_\_\_

ID# \_\_\_\_\_

**MH/MT Technician Program - 21 credits**

	Cr	Sem.	Grade	TR Equiv.
Training Upgrading Fund Partnership	21	<input type="checkbox"/>		

**CORE COMPETENCIES - 24 credits**

	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
WRTG-105	Writing About Workplace Culture	3	<input type="checkbox"/>		
MATH-215	College Algebra	3	<input type="checkbox"/>		
SCI-101	Environmental Science	3	<input type="checkbox"/>		
HIST-114	American Transitions	3	<input type="checkbox"/>		
PSYCH-101	Introduction to Psychology	3	<input type="checkbox"/>		
COMM-320	Professional Communication Skills	3	<input type="checkbox"/>		
HLTSV-210	Ethical Issues for Human Services Providers	3	<input type="checkbox"/>		
IT-101	Introduction to Information Systems	3	<input type="checkbox"/>		

**MAJOR CORE - 15 credits**

	(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
* PSYCH-201	Abnormal Psychology (PSYCH-101)	3	<input type="checkbox"/>		
* PSYCH-224	Psychology of Addiction (PSYCH-101)	3	<input type="checkbox"/>		
* PSYCH-233	Inter Relations & Small Group Dynamics (PSYCH-101)	3	<input type="checkbox"/>		
* COMM-310	Communication Theory & Practice	3	<input type="checkbox"/>		
* BEHLT-290	Clinical Interactions in Behavioral Health (COMM-310, PSYCH-233)	3	<input type="checkbox"/>		

\* Minimum of 12 credits in the major core must be completed at Philadelphia University

**TOTAL CREDITS: 60 credits**

Surplus credits not used toward A.S. degree requirements

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**Please note Philadelphia University residency requirement:**

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Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Comments:

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ACCELERATED DEGREE PROGRAMS**

**2012-2013**

**CONTINUING STUDIES**  
*(Available only to employees of Philadelphia University)*

Name \_\_\_\_\_ ID# \_\_\_\_\_

**College Studies Courses – 21-23 credits**

		<i>(Prerequisite)</i>	Cr	Sem.	Grade	TR Equiv.
WRTG-105	Writing About Workplace Culture		3	<input type="checkbox"/>		
HIST-114	American Transitions		3	<input type="checkbox"/>		
SCI-101	Environmental Science		3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I	<i>(WRTG-101/105, HIST-114)</i>	3	<input type="checkbox"/>		
( )	Humanities I	<i>(WRTG-101/105, HIST-114)</i>	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I <i>(select one, 2-course option below)</i>		3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective <i>(select below)</i>		3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3 cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Business & Economics Core - 30 credits**

		<i>(Prerequisite)</i>	Cr	Sem.	Grade	TR Equiv.
INFO-101	Intro. to Information Systems		3	<input type="checkbox"/>		
MGMT-301	Principles of Management		3	<input type="checkbox"/>		
STAT-201	Statistics I	<i>(Quantitative Reasoning I)</i>	3	<input type="checkbox"/>		
MKTG-102	Principles of Marketing		3	<input type="checkbox"/>		
ACCT-101	Financial Accounting		3	<input type="checkbox"/>		
ACCT-102	Managerial Accounting	<i>(ACCT-101)</i>	3	<input type="checkbox"/>		
FINC-301	Financial Management	<i>(ACCT-101; STAT-201 or Quantitative Reasoning I)</i>	3	<input type="checkbox"/>		
BLAW-301	Business Law I		3	<input type="checkbox"/>		
ECON-205	Macroeconomics		3	<input type="checkbox"/>		
ECON-206	Microeconomics		3	<input type="checkbox"/>		

**Free Electives - 9 credits**

			Cr	Sem.	Grade	TR Equiv.
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		

**TOTAL CREDITS: 60-62 credits**

**Surplus credits not used toward A.S. degree requirements**

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Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

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Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

CONTINUING STUDIES (Restricted Enrollment)

Name \_\_\_\_\_

ID# \_\_\_\_\_

**MH/MT Technician Program - 30 credits**

		Cr	Sem.	Grade	TR Equiv.
HVMSV-199	Human Services Training Program	30	<input type="checkbox"/>		

**CORE COMPETENCIES - 21 credits**

		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
WRTG-105	Writing About Workplace Culture		3	<input type="checkbox"/>		
MATH-215	College Algebra		3	<input type="checkbox"/>		
SCI-101	Environmental Science		3	<input type="checkbox"/>		
HIST-114	American Transitions		3	<input type="checkbox"/>		
PSYCH-101	Introduction to Psychology		3	<input type="checkbox"/>		
COMM-310	Communication Theory & Practice		3	<input type="checkbox"/>		
IT-101	Introduction to Information Systems		3	<input type="checkbox"/>		

**MAJOR CORE - 9 credits**

		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
PSYCH-201	Abnormal Psychology	(PSYCH-101)	3	<input type="checkbox"/>		
PSYCH-233	Inter Relations & Small Group Dynamics	(PSYCH-101)	3	<input type="checkbox"/>		
BEHLT-290	Clinical Interactions in Behavioral Health	(COMM-310, PSYCH-233)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 60 credits**

**Surplus credits not used toward A.S. degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University Continuing Studies students must complete a minimum of 20 credits through the University in order to be eligible for an A.S. degree. This document should be used as a worksheet in conjunction with the University catalog. Please refer to the Philadelphia University catalog (<[www.philau.edu/catalog](http://www.philau.edu/catalog)>) for questions regarding curriculum and University policies.

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Comments:

CONTINUING STUDIES

Name \_\_\_\_\_

ID# \_\_\_\_\_

**Prerequisites**

\_\_\_\_\_ High School Diploma or G.E.D

<b>First Year CourseWork – 33 credits</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
IT-201	Learning with Technology		3	<input type="checkbox"/>	_____	_____
WRTG-105	Writing About Workplace Culture		3	<input type="checkbox"/>	_____	_____
HIST-232	History & Philosophy of OTA Practice		3	<input type="checkbox"/>	_____	_____
BIOL-101	Current Topics in Biology		3	<input type="checkbox"/>	_____	_____
OTA-300	Anatomy, Physiology & Biomechanics		6	<input type="checkbox"/>	_____	_____
PSYCH-101	Introduction to Psychology		3	<input type="checkbox"/>	_____	_____
OTA-302	Occupations Across the Lifespan I: Infancy through Adolescence		3	<input type="checkbox"/>	_____	_____
OTA 306	Conditions I: Infancy through Adolescence		3	<input type="checkbox"/>	_____	_____
OTA-304	Occupations Across the Lifespan II: Adulthood		3	<input type="checkbox"/>	_____	_____
OTA 308	Conditions II: Adulthood		3	<input type="checkbox"/>	_____	_____

<b>Second Year Coursework - 36 credits</b>		(Prerequisite)	Cr	Sem.	Grade	TR Equiv.
OTA 310	Environments & Contexts of Occupation		3	<input type="checkbox"/>	_____	_____
OTA 410	Interventions I: Infancy through Adolescence		4	<input type="checkbox"/>	_____	_____
OTA 412	Interventions II: Young through Middle Adulthood		4	<input type="checkbox"/>	_____	_____
MATH-215	College Algebra		3	<input type="checkbox"/>	_____	_____
OTA 414	Interventions III: Late Adulthood		4	<input type="checkbox"/>	_____	_____
OTA 400	Leadership and Human Service Systems		3	<input type="checkbox"/>	_____	_____
OTA 406	Fieldwork II A		6	<input type="checkbox"/>	_____	_____
OTA 402	Ethics and Critical Thinking I		2	<input type="checkbox"/>	_____	_____
OTA 408	Fieldwork II B		6	<input type="checkbox"/>	_____	_____
OTA 404	Ethics and Critical Thinking II		1	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 69 credits**

**Surplus credits not used toward A.S. degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University Continuing Studies students must complete a minimum of 60 credits at the University in order to be eligible for an A.S. degree. This document should be used as a worksheet in conjunction with the University catalog. Please refer to the Philadelphia University catalog (<[www.philau.edu/catalog](http://www.philau.edu/catalog)>) for questions regarding curriculum and University policies.

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ACCELERATED DEGREE PROGRAMS**  
 CONTINUING STUDIES - HEALTH SCIENCES

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**Specific Course Requirements** (This section should be completed within one year of beginning the program)

Course competency	Course Title / Institution / Grade	Completion Date	Credits
<input type="checkbox"/> Writing	_____	_____	_____
<input type="checkbox"/> Math	_____	_____	_____
<input type="checkbox"/> Science	_____	_____	_____
<input type="checkbox"/> History	_____	_____	_____
<input type="checkbox"/> Social Science/Psychology	_____	_____	_____
<input type="checkbox"/> Humanities	_____	_____	_____
<input type="checkbox"/> Information Systems	_____	_____	_____

**Additional courses to reach 60 credit total**

Course Number/Title	Institution / Grade	Completion Date	Credits
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

❖ GENERAL EDUCATION CORE - 15 credits		Cr	Sem.	Grade	TR Equiv.
HIST-321	Business, Industry & Work in American History	3	<input type="checkbox"/>	_____	_____
HUMN-310	Globalization & World Politics	3	<input type="checkbox"/>	_____	_____
SOC-310	The Social Science of the Workplace	3	<input type="checkbox"/>	_____	_____
COMM-320	Professional Communication Skills	3	<input type="checkbox"/>	_____	_____
◆ CSSEM-499	Professional Studies Capstone Seminar	3	<input type="checkbox"/>	_____	_____

❖ CONTINUING PROFESSIONAL STUDIES CORE - 20 credits		(Prerequisites)	Cr	Sem.	Grade	TR Equiv.
★ CSSEM-300	Professional Practice Seminar		3	<input type="checkbox"/>	_____	_____
MGMT-361	Leadership Theory & Ethical Practices		3	<input type="checkbox"/>	_____	_____
STAT-311	Finding & Evaluating Statistical Data		3	<input type="checkbox"/>	_____	_____
IT-201	Learning with Technology		3	<input type="checkbox"/>	_____	_____
BIOL-104	Biology II	(Biology I or equivalent)	4	<input type="checkbox"/>	_____	_____
BIOL-201	Anatomy & Physiology I	(BIOL-104)	4	<input type="checkbox"/>	_____	_____

- ❖ Minimum of 9 credits must be completed at Philadelphia University
- ★ Indicates course that must be completed as one of the **first** 3 courses taken at Philadelphia University
- ◆ Indicates course that must be completed as one of the **final** 3 courses taken at Philadelphia University; must be completed at Philadelphia University



COURSE STATUS:  = course to take next semester  = course currently being taken  = course completed

**MAJOR CONCENTRATION - 15-16 credits** (Prerequisites) Cr Sem. Grade TR Equiv.

(Students must complete five (5) of the courses listed below)

BIOL-202	Anatomy & Physiology II	(BIOL-201)	4			
PSYCH-201	Abnormal Psychology	(PSYCH-101)	3			
PSYCH-213	Developmental Psychology	(PSYCH-101)	3			
PSYCH-233	Interpersonal Relations & Small Group Dynamics	(PSYCH-101)	3			
BEHLT-341	Behavioral Health & Neurorehabilitation		3			
BEHLT-499	Applied Project in Behavioral Health & Neurorehabilitation		3			

- \* ( ) 3
- \* ( ) 3
- \* ( ) 3
- \* ( ) 3
- \* ( ) 3-4

\* Minimum of 12 credits must be completed at Philadelphia University

**FREE ELECTIVES - 9-10 credits** Cr Sem. Grade TR Equiv.

( )		( )	<input type="checkbox"/>			
( )		( )	<input type="checkbox"/>			
( )		( )	<input type="checkbox"/>			
( )		( )	<input type="checkbox"/>			

**TOTAL CREDITS: 120 credits**

**Please note Philadelphia University residency requirement:**

*Philadelphia University Continuing Studies students must complete a minimum of 33 credits at the University. 12 of those credits must be within the Major Core; 9 credits must be within the Continuing Professional Studies Core including credits from CSSEM-300 Professional Practice Seminar in order to be eligible for a B.S. degree. CSSEM-499 must be completed at Philadelphia University. This document should be used as a worksheet in conjunction with the University catalog. Please refer to the Philadelphia University catalog (<[www.philau.edu/catalog](http://www.philau.edu/catalog)>) for questions regarding curriculum and University policies.*

- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Advisor's Name \_\_\_\_\_ Updated (Date) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

COURSE STATUS:  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
**POST-BACCALAUREATE CERTIFICATE: ACCOUNTING**  
 CONTINUING STUDIES

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

Pennsylvania requires a bachelor's degree and 24 credits of accounting to sit for the C.P.A. Examination. The Accounting Certificate program is designed for individuals who have a bachelor's degree in a field other than accounting and who wish to take the C.P.A. examination.

Students should be aware that experience in public accounting is also required for certification. Students who apply for this program must have a bachelor's degree. Students should consult with an advisor for current requirements.

		<i>(prerequisite)</i>	Cr	Sem.	Grade
ACCT-101	Financial Accounting		3	<input type="checkbox"/>	_____
ACCT-203	Intermediate Accounting I	<i>(ACCT-101)</i>	3	<input type="checkbox"/>	_____
ACCT-204	Intermediate Accounting II	<i>(ACCT-203)</i>	3	<input type="checkbox"/>	_____
ACCT-309	Federal Taxes I	<i>(ACCT-101)</i>	3	<input type="checkbox"/>	_____
ACCT-316	Cost Accounting	<i>(ACCT-203)</i>	3	<input type="checkbox"/>	_____
ACCT-303	Accounting Theory & Practice	<i>(ACCT-204)</i>	3	<input type="checkbox"/>	_____
ACCT-409	Auditing	<i>(ACCT-204)</i>	3	<input type="checkbox"/>	_____
ACCT-412	Advanced Accounting	<i>(ACCT-303)</i>	3	<input type="checkbox"/>	_____

**TOTAL CREDITS: 24**

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**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

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Please note that the requirements for the C.P.A. examination are being evaluated for change and therefore, could impact changes in the above courses in the future. Consult with an advisor before finalizing your

Students may need to enroll in late afternoon or summer classes to complete requirements as evening classes are no longer available.

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: BUSINESS / Accounting

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WR TG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education...OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives.

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Business Core – 12 credits**

ECON-206	Microeconomics	3	<input type="checkbox"/>	_____	_____
ACCT-101	Financial Accounting (Fall)	3	<input type="checkbox"/>	_____	_____
MKTG-104	Marketing Foundations	1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations	1.5	<input type="checkbox"/>	_____	_____
ACCT-102	Managerial Accounting (Spring)	(ACCT-101) 3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

WR TG-2( )	Writing Seminar II <small>(WR TG-211 Writing Seminar II for Business recommended)</small>	(WR TG-101/101G, HIST-114) 3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	(WR TG-101/101G, HIST-114) 3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies <small>(WR TG-101/101G, HIST-114 for Area Studies only)</small>	3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	(DECPROC-101) 3	<input type="checkbox"/>	_____	_____
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**Business Core – 9 credits**

STAT-201	Statistics I (Fall)	(Quantitative Reasoning I) 3	<input type="checkbox"/>	_____	_____
STAT-202	Statistics II (Spring)	(C or better in STAT-101) 3	<input type="checkbox"/>	_____	_____
ECON-205	Macroeconomics	3	<input type="checkbox"/>	_____	_____

**Concentration Courses - 6 credits**

ACCT-203	Intermediate Accounting I (Fall only)	(ACCT-101) 3	<input type="checkbox"/>	_____	_____
ACCT-204	Intermediate Accounting II (Spring only)	(ACCT-203) 3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR)- 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I	(WR TG-101/101G, HIST-114) 3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies <small>(WR TG-101/101G, HIST-114 for Area Studies only)</small>	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar <small>(Soc Sci I and Writing II)</small>	3	<input type="checkbox"/>	_____	_____

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II) 3	<input type="checkbox"/>	_____	_____
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Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12-16 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>			
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>			
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>			
MATH-( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>			

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education.....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process		3	<input type="checkbox"/>			
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**Business Core - 12 credits**

ECON-206	Microeconomics		3	<input type="checkbox"/>			
ACCT-101	Financial Accounting (Fall)		3	<input type="checkbox"/>			
MKTG-104	Marketing Foundations		1.5	<input type="checkbox"/>			
MGMT-104	Management Foundations		1.5	<input type="checkbox"/>			
ACCT-102	Managerial Accounting (Spring)	(ACCT-101)	3	<input type="checkbox"/>			

**Concentration Courses - 3 credits**

TEXT-101	Survey of the Textile Industry (Fall)		3	<input type="checkbox"/>			
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**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			
( )	[WRTG-211 Writing Seminar II for Business recommended]						
( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			
CHEM-101	Science: General Chemistry		3	<input type="checkbox"/>			

**DEC Systems- 3 cr**

DECSYS-2( )	(Select one DECSYS)		3	<input type="checkbox"/>			
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**DEC Frameworks- 3 credits**

DECFRM-200	Business Models	(DECPROC-101)	3	<input type="checkbox"/>			
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**Business Core - 3 credits**

STAT-201	Statistics I	(Quantitative Reasoning I)	3	<input type="checkbox"/>			
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**Concentration Courses - 12 credits**

FASHMGT-101	Survey of Global Products	(TEXT-101)	3	<input type="checkbox"/>			
FASHMGT-201....	Prototyping		3	<input type="checkbox"/>			
.....OR.....FASHDES-211	Garment Structures (Students who choose FASHDES-211 in the FIM core must also complete FASHDES-213 as the Designated FIM Elective.)						
FASHMGT-305N	Production	(FASHMGT-101, FASHMGT-201 OR FASHDES-213)	3	<input type="checkbox"/>			
CAD-201	Introduction to Digital Imaging		3	<input type="checkbox"/>			

**LEVEL III (THIRD YEAR)- 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies – 9 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>			

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
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PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: BUSINESS / Finance

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses– 15-17 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Science	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**DEC Process - 3 cr**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>		
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**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Business Core – 12 credits**

ACCT-101	Financial Accounting (Fall)	3	<input type="checkbox"/>		
MKTG-104	Marketing Foundations	1.5	<input type="checkbox"/>		
MGMT-104	Management Foundations	1.5	<input type="checkbox"/>		
ACCT-102	Managerial Accounting (Spring)	(ACCT-101) 3	<input type="checkbox"/>		
ECON-206	Microeconomics	3	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 30 credits** Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>		
( )	<small>[WRTG-211 Writing Seminar II for Business recommended]</small>				
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		
HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		

**Business Core – 9 credits**

STAT-201	Statistics I (Fall)	3	<input type="checkbox"/>		
STAT-202	Statistics II (Spring)	(Quantitative Reasoning I) 3	<input type="checkbox"/>		
ECON-205	Macroeconomics	(C or better in STAT-101) 3	<input type="checkbox"/>		

**DEC Systems - 3 cr**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>		
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**DEC Frameworks - 3 cr**

DECFRM-200	Business Models	3	<input type="checkbox"/>		
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**Free Elective or Internship - 3 credits**

( )		3	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR) - 30 credits** Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

( )	Language or Area Studies	3	<input type="checkbox"/>		
JSLA-3( )	Junior Seminar	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		
		(Soc Sci I and Writing II) 3	<input type="checkbox"/>		

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	3	<input type="checkbox"/>		
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Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
( )	Science		3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 cr**

DECPROC-101	Integrative Design Process		3	<input type="checkbox"/>	_____	_____
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**Business Core – 9 credits**

ACCT-101	Financial Accounting (Fall)		3	<input type="checkbox"/>	_____	_____
MKTG-104	Marketing Foundations		1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations		1.5	<input type="checkbox"/>	_____	_____
ACCT-102	Managerial Accounting (Spring)	(ACCT-101)	3	<input type="checkbox"/>	_____	_____

**Concentration Courses - 3 credits**

MKTG-115	Fashion Merchandising		3	<input type="checkbox"/>	_____	_____
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**LEVEL II (SECOND YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

WRTG-2( )	Writing Seminar II <small>[WRTG-211 Writing Seminar II for Business recommended]</small>	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 cr**

DECSYS-2( )	(Select one DECSYS)		3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 cr**

DECFRM-200	Business Models	(DECPROC-101)	3	<input type="checkbox"/>	_____	_____
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**Business Core – 12 credits**

STAT-201	Statistics I (Fall)	(Quantitative Reasoning I)	3	<input type="checkbox"/>	_____	_____
STAT-202	Statistics II (Spring)	(C or better in STAT-101)	3	<input type="checkbox"/>	_____	_____
ECON-206	Microeconomics		3	<input type="checkbox"/>	_____	_____
ECON-205	Macroeconomics		3	<input type="checkbox"/>	_____	_____

**Concentration Courses - 6 credits**

MKTG-217	Retail Strategy and Structure	(MKTG-104, DECPROC-101, DEC-200)	3	<input type="checkbox"/>	_____	_____
TEXT-101	Survey of Textile Industry		3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR)- 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101 , HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**DEC Methods - 3 cr**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
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LEVEL III (THIRD YEAR) - continued

(Prerequisite) Cr Sem. Grade TR Equiv.

**Business Core – 6 credits**

FINC-301	Financial Management (Fall)	(ACCT-101 & STAT-201 or MATH-101)	3	<input type="checkbox"/>		
BLAW-301	Business Law		3	<input type="checkbox"/>		

**Concentration Courses - 9 credits**

MKTG-207	Consumer in the Marketplace	(MKTG-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>		
MKTG-328	Merchandising Buying / Operations	(MKTG-217)	3	<input type="checkbox"/>		
FASHMGMT-101	Survey of Global Products	(TEXT-101)	3	<input type="checkbox"/>		

LEVEL IV (FOURTH YEAR)- 31 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		
<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>						

**Fashion Business Core – 9 credits**

FASHMGMT-451	Operations & Supply Chain Management		3	<input type="checkbox"/>		
<i>(MGMT-104, DECPROC-101, DECFRM-200, MATH-103 or MATH-111, pre- or co-requisite STAT-202 or MATH-111)</i>						

** FASHMGMT4XX	Fashion Strategy Capstone		6	<input type="checkbox"/>		
<i>(senior status, MGMT-104, MKTG-104, DECPROC-101, DECFRM-200, FINC-301, FASHMGMT-101)</i>						

**Concentration Courses - 9 credits**

MKTG-310	Integrated Marketing Communications	(MKTG-207)	3	<input type="checkbox"/>		
MKTG-302	Product Development and Innovation	(MKTG-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>		
DSGNFDN-423	Design Concepts	(FASHMGMT-101)	3	<input type="checkbox"/>		

**Free Electives/Internships - 9 credits**

( )			3	<input type="checkbox"/>		
( )			3	<input type="checkbox"/>		
( )			3	<input type="checkbox"/>		

**TOTAL CREDITS: 122-124 credits**

\*\* satisfies DEC capstone requirement

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: BUSINESS / International Business**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
( )	Science		3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives.

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process		3	<input type="checkbox"/>	_____	_____
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**Business Core – 9 credits**

ACCT-101	Financial Accounting (Fall)		3	<input type="checkbox"/>	_____	_____
MKTG-104	Marketing Foundations		1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations		1.5	<input type="checkbox"/>	_____	_____
ACCT-102	Managerial Accounting (Spring)	(ACCT-101)	3	<input type="checkbox"/>	_____	_____

**Concentration Core - 3 credits**

◆ ( )	Language I (see note on next page for special requirements)		3	<input type="checkbox"/>	_____	_____
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**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____

[WRTG-211 Writing Seminar II for Business recommended]

**Business Core – 12 credits**

STAT-201	Statistics I (Fall)	(Quantitative Reasoning I)	3	<input type="checkbox"/>	_____	_____
STAT-202	Statistics II (Spring)	(C or better in STAT-101)	3	<input type="checkbox"/>	_____	_____
ECON-206	Microeconomics		3	<input type="checkbox"/>	_____	_____
ECON-205	Macroeconomics		3	<input type="checkbox"/>	_____	_____

**Concentration Courses - 6 credits**

◆ ( )	Language II (see note on next page for special requirements)		3	<input type="checkbox"/>	_____	_____
◆ ( )	Language III (see note on next page for special requirements)		3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)		3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	(DECPROC-101)	3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR)- 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR) (continued)**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Business Core – 6 credits**

BLAW-301	Business Law I (Fall)		3	<input type="checkbox"/>			
FINC-301	Financial Management (Fall)	(ACCT-101; STAT-201 or Quantitative Reasoning I)	3	<input type="checkbox"/>			

**Concentration Courses - 12 credits**

◆ ( )	Language IV (see note below for special requirements)		3	<input type="checkbox"/>			
MGMT-307	International Management (Spring only)	(MGMT-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>			
MKTG-324	International Marketing	(MKTG-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>			
ECON-401	International Economics	(ECON-205, ECON-206)	3	<input type="checkbox"/>			

❖ **Secondary Concentration Courses - 3 credits** (Select from the list below)

Secondary Concentration Chosen: \_\_\_\_\_

( )	(Level III)		3	<input type="checkbox"/>			
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**LEVEL IV (FOURTH YEAR)- 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives	(Humanities I, one Language/Area Studies, one Junior Seminar)	4	<input type="checkbox"/>			
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**Business Core – 9 credits**

MGMT-401	Operations Management	(MGMT-104, DECPROC-101, DECFRM-200, MATH-103 or MATH-111; pre- or co-requisite STAT-202 or MATH-111)	3	<input type="checkbox"/>			
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** MGMT-490N	Business Policy & Strategy	(senior-status, MGMT-104, MKTG-104, DECPROC-101, DECFRM-200, FINC-301)	6	<input type="checkbox"/>			
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**Concentration Course - 3 credits**

FINC-318	International Finance & Development (Spring only)	(ECON-205, ECON-206, FINC-301)	3	<input type="checkbox"/>			
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❖ **Secondary Concentration Courses - 15 credits** (Select from the list below)

Secondary Concentration Chosen: \_\_\_\_\_

( )	(Level IV)		3	<input type="checkbox"/>			
( )	(Level IV)		3	<input type="checkbox"/>			
( )	(Level IV)		3	<input type="checkbox"/>			
( )	(Level IV)		3	<input type="checkbox"/>			
( )	(Level IV)		3	<input type="checkbox"/>			

**TOTAL CREDITS: 122-124 credits**

\*\* satisfies DEC capstone requirement

❖	Choose a Secondary Concentration and the appropriate 18 credits from the list below (3 cr Level III & 15 cr Level IV)
Accounting	ACCT-203 (Fall only), ACCT-204 (Spring only), ACCT-303 (Fall only), ACCT-309 (Fall only), ACCT-409 (Fall only), ACCT-412 (Spring only)
Finance	FINC-322 (Fall only), FINC-303 (Fall only), FINC-321, FINC-411 (Spring only), Language V, Area Studies
Management	MGMT-320, MGMT-412, MGMT-310, MGMT-315, MGMT-411, One Designated Management Elective: Choose One-MIS-202, MKTG-302, MKTG-315, SUST-402, MGMT-381
Marketing	MKTG-207, MKTG-310, MKTG-391, MKTG-412, MKTG-302, One Designated Marketing Elective: Choose One - MKTG-315, MKTG-408, MKTG-324, or MKTG-217, MKTG-328, MKTG-381

◆ **Note: I.B. Concentration must include a minimum of four courses (12 credit hours) in a foreign language/area studies. The division of the courses over the two subjects is determined by the student's language competency and need for further language studies. Students must take the highest level of language for which they are qualified. The equivalent of semester three language proficiency (Intermediate Low of the ACTFL Proficiency standard) in a language is required prior to attempting to fulfill the study abroad requirement of the International Business major. At least one course, but not more than two, must be in area studies. It is strongly encouraged that students select area studies that are consistent with the foreign language studies chosen.**

**International Business students are required to study abroad (minimum of 2 courses).**

<b>Fundamentals Courses:</b> (Fundamental "099" courses do <b>not</b> count toward graduation requirements. However, WRTG-100 <b>can</b> be used toward graduation credits...as a free elective.)			
MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3 <input type="checkbox"/>
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3 <input type="checkbox"/>

**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives.

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Business Core – 12 credits**

ECON-206	Microeconomics	3	<input type="checkbox"/>	_____	_____
ACCT-101	Financial Accounting (Fall)	3	<input type="checkbox"/>	_____	_____
MKTG-104	Marketing Foundations	1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations	1.5	<input type="checkbox"/>	_____	_____
ACCT-102	Managerial Accounting (Spring)	(ACCT-101) 3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
HUMN-2( )	Humanities I	(WRTG-101/101, HIST-114)	3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	(DECPROC-101)	3	<input type="checkbox"/>	_____	_____
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**Business Core – 9 credits**

STAT-201	Statistics I (Fall)	(Quantitative Reasoning I)	3	<input type="checkbox"/>	_____	_____
STAT-202	Statistics II (Spring)	(C or better in STAT-101)	3	<input type="checkbox"/>	_____	_____
ECON-205	Macroeconomics		3	<input type="checkbox"/>	_____	_____

**Free Elective - 3 credits**

( )		3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR)- 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
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**Business Core – 6 credits**

BLAW-301	Business Law I (Fall)		3	<input type="checkbox"/>	_____	_____
FINC-301	Financial Management (Fall)	(ACCT-101; STAT-201 or Quantitative Reasoning I)	3	<input type="checkbox"/>	_____	_____



Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3 cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives.

**DEC: Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Business Core – 12 credits**

ACCT-101	Financial Accounting (Fall)	3	<input type="checkbox"/>	_____	_____
MKTG-104	Marketing Foundations	1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations	1.5	<input type="checkbox"/>	_____	_____
ACCT-102	Managerial Accounting (Spring)	3	<input type="checkbox"/>	_____	_____
ECON-206	Microeconomics	3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II <small>[WRTG-211 Writing Seminar II for Business recommended]</small>	3	<input type="checkbox"/>	_____	_____
HUMN-2( )	Humanities I	3	<input type="checkbox"/>	_____	_____

**DEC: Systems – 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC: Frameworks – 3 credits**

DECFRM-200	Business Models	3	<input type="checkbox"/>	_____	_____
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**Business Core – 9 credits**

STAT-201	Statistics I (Fall)	3	<input type="checkbox"/>	_____	_____
STAT-202	Statistics II (Spring)	3	<input type="checkbox"/>	_____	_____
ECON-205	Macroeconomics	3	<input type="checkbox"/>	_____	_____

**Concentration Courses - 6 credits**

MKTG-207	Consumer in the Marketplace	3	<input type="checkbox"/>	_____	_____
MKTG-310	Intergrated Marketing Communications (Spring)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR)- 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	3	<input type="checkbox"/>	_____	_____

**DEC: Methods – 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Business Core - 6 credits**

BLAW-301	Business Law I (Fall)		3	<input type="checkbox"/>		
FINC-301	Financial Management (Fall)	(ACCT-101; STAT-201 or Quantitative Reasoning I)	3	<input type="checkbox"/>		

**Concentration Courses - 6 credits**

MKTG-302	Product Development & Innovation	(MKTG-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>		
MKTG-391	Marketing Research	(MKTG-207, and pre or co-requisite STAT-202)	3	<input type="checkbox"/>		

\* **Designated Marketing Elective - 3 credits**

( )	_____		3	<input type="checkbox"/>		
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**Free Elective - 3 credits**

( )	_____		3	<input type="checkbox"/>		
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**LEVEL IV (FOURTH YEAR)- 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses - 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		
<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>						

**Business Courses - 9 credits**

MGMT-401	Operations Management		3	<input type="checkbox"/>		
<i>(MGMT-104, DECPROC-101, DECFRM-200, MATH-103 or MATH-111; pre- or co-requisite STAT-202 or MATH-111)</i>						

** MGMT-490N	Business Policy & Strategy		6	<input type="checkbox"/>		
<i>(senior-status, MGMT-104, MKTG-104, DECPROC-101, DECFRM-200, FINC-301)</i>						

**Concentration Courses - 3 credits**

MKTG-412	Marketing Strategy Seminar		3	<input type="checkbox"/>		
<i>(senior status, and pre or co-requisites MKTG-207, MKTG-310, MKTG-391)</i>						

\* **Minor Courses - 12 credits**

	Minor Chosen					
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		

**Free Elective or Internship - 3 credits**

( )	_____		3	<input type="checkbox"/>		
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**TOTAL CREDITS: 122-124 credits**

\* **Designated Marketing Electives:** (choose one from the following list) - MKTG-315, MKTG-408, MKTG-324, MKTG-217, MKTG-328, MKTG-381

\*\* satisfies DEC capstone requirement

\* **Courses in the minor may be taken during the third year, except for pre-MBA. Students must be accepted into this graduate program.**

**Fundamentals Courses:** (Fundamental "099" courses do not count toward graduation requirements. However, WRTG-100 can be used toward graduation credits...as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits - 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: ANIMATION

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science	3	<input type="checkbox"/>	_____	_____
ARTH-101.....	Arts & Culture: History of Western Art I	3	<input type="checkbox"/>	_____	_____
.....OR.....	ARTH-102 History of Western Art II				
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3 cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 12 credits**

VSDS-101	Visual Studies: Design	3	<input type="checkbox"/>	_____	_____
DRAW-101	Drawing I (Fall)	3	<input type="checkbox"/>	_____	_____
( )	<b>Drawing II Elective:</b> Select either DRAW-201 or ADFND-104	3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	(DECPROC-101)	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 17 credits**

GRAPH-201	Design III for Graphic Design (Fall only)	(C or better in VSDS-101 or DSGNFND-203)	4	<input type="checkbox"/>	_____	_____
DRAW-206	Drawing II: Figure Drawing (Spring)	(DRAW-101)	3	<input type="checkbox"/>	_____	_____
ANIM-201	Introduction to Animation (Fall)	(VSDS-101)	3	<input type="checkbox"/>	_____	_____
ANIM-202	Storytelling & Storyboarding (Spring)	(ANIM-201)	3	<input type="checkbox"/>	_____	_____
ANIM-307	3D Modeling (Spring)	(ANIM-201)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR)- 33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>			
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>			

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
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**Major Courses – 24 credits**

**Animation Core**

ANIM-301N	Motion Graphics I (Fall)	(ANIM-202)	4	<input type="checkbox"/>			
ANIM-312	Motion Graphics II (Spring)	(ANIM-301, ANIM-307)	3	<input type="checkbox"/>			
ANIM-308N	3D Animation (Fall)	(ANIM-307)	4	<input type="checkbox"/>			
ANIM-407N	Adv. Topics in 3D Animation (Spring)	(ANIM-308)	4	<input type="checkbox"/>			
INDD-324	History of Design & Comm (Fall)		3	<input type="checkbox"/>			
ANIM-303	History of Animated Cinema (Spring)	(ANIM-202)	3	<input type="checkbox"/>			

**Animation Elective** (select one elective; consult with advisor)

( )		(ANIM-202)	3	<input type="checkbox"/>			
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**LEVEL VI (FOURTH YEAR) - 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>			
COLLST-499	Contemporary Perspectives	(Humanities I, one Language/Area Studies, one Junior Seminar)	4	<input type="checkbox"/>			

**Major Courses – 19 credits**

**Animation Core**

ANIM-497N	Animation Capstone I (Fall)	(ANIM-407, ANIM-312)	6	<input type="checkbox"/>			
** ANIM-499N	Animation Capstone II (Spring)	(ANIM-407, ANIM-497N)	6	<input type="checkbox"/>			

**Animation Electives** (select two electives in consultation with academic advisor)

( )		(ANIM-202)	3	<input type="checkbox"/>			
( )		(ANIM-202)	3	<input type="checkbox"/>			

**Business Core - 3 credits**

BLAW-301	Business Law I (Spring)		3	<input type="checkbox"/>			
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**Free Elective - 3 credits**

( )			3	<input type="checkbox"/>			
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**TOTAL CREDITS: 126-128 credits**

\*\* Satisfies DEC capstone requirement

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>			
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>			

**Surplus credits not used toward degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
 BACHELOR of SCIENCE in ENGINEERING: ENGINEERING

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 22 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
CHEM-103/103L	Science I: Chemistry I w/ Lab	4	<input type="checkbox"/>		
PHYS-201/201L	Science II: Physics I w/ Lab (Spring) <span style="float: right;"><i>(pre-or co-requisite MATH-112)</i></span>	4	<input type="checkbox"/>		
MATH-111	Calculus I (Fall) [MATH-102 Pre-calculus may be required prior to taking MATH-111]	4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring) <span style="float: right;"><i>(MATH-111)</i></span>	4	<input type="checkbox"/>		

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>		
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**Engineering Courses – 9 credits**

ENGR-101	Introduction to Engineering (Fall)	3	<input type="checkbox"/>		
ENGR-102	Engineering Drawing (Spring) <span style="float: right;"><i>(MATH-102 or MATH-111)</i></span>	3	<input type="checkbox"/>		
ENGR-104	Introduction to Computing (Spring)	3	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

SOC-2( )	Social Sciences I <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;"><i>(WRTG-101/101G, HIST-114)</i></span> [WRTG-217 Writing Seminar II for Science & Engineering recommended]	3	<input type="checkbox"/>		

**DEC Systems - 3 credits**

DECSYS-2( )	<i>(Select one DECSYS)</i>	3	<input type="checkbox"/>		
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**DEC Frameworks - 3 credits**

DECFRAM-200	Business Models <span style="float: right;"><i>(DEC-PROC101)</i></span>	3	<input type="checkbox"/>		
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**Engineering Courses – 20 credits**

PHYS-203/203L	Physics II w/ Lab (Fall) <span style="float: right;"><i>(PHYS-201/201L)</i></span>	4	<input type="checkbox"/>		
MATH-213	Calculus III (Fall) <span style="float: right;"><i>(MATH-112)</i></span>	4	<input type="checkbox"/>		
ENGR-215	Engineering Statics (Fall) <span style="float: right;"><i>(PHYS-201/201L; pre- or co-requisite MATH-213)</i></span>	3	<input type="checkbox"/>		
MATH-225	Differential Equations (Spring) <span style="float: right;"><i>(MATH-213)</i></span>	3	<input type="checkbox"/>		
ENGR 301	Mechanics of Materials (Spring) <span style="float: right;"><i>(ENGR-215)</i></span>	3	<input type="checkbox"/>		
ENGR-305	Engineering Statistics I (Spring) <span style="float: right;"><i>(MATH 112)</i></span>	3	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR) - 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 3 credits**

HUMN-2( )	Humanities I <span style="float: right;"><i>(Soc Sci I and Writing II)</i></span>	3	<input type="checkbox"/>		
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**DEC Methods - 3 credits**

DECMTHD-3( )	<i>(Select one DECMTHD)</i> <span style="float: right;"><i>(Soc Sci I and Writing II)</i></span>	3	<input type="checkbox"/>		
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**Engineering Courses – 27 credits**

ENGR-218	Engineering Dynamics (Fall) <span style="float: right;"><i>(ENGR-215; pre or co-requisite MATH-225)</i></span>	3	<input type="checkbox"/>		
ENGR-314	Numerical Methods for Engineers (Fall) <span style="float: right;"><i>(MATH-225, ENGR-104)</i></span>	3	<input type="checkbox"/>		
ENGR-322	Fund. of Electrical Engineering I (Spring) <span style="float: right;"><i>(PHYS-203/203L)</i></span>	3	<input type="checkbox"/>		
ENGR-311	Fluid Mechanics (Spring) <span style="float: right;"><i>(ENGR-218)</i></span>	3	<input type="checkbox"/>		
ENGR-308	Integrated Engr Product Development <span style="float: right;"><i>(MATH-112, ENGR-104, ENGR-102)</i></span>	3	<input type="checkbox"/>		
ENGR 407	Thermodynamics and Heat Transfer I <span style="float: right;"><i>(PHYS-201/201L, MATH-112)</i></span>	3	<input type="checkbox"/>		
ENGR-304	Operations Research I (Fall) <span style="float: right;"><i>(MATH-112, ENGR-305)</i></span>	3	<input type="checkbox"/>		

**Engineering Option** (Select one, 4-course option listed on the next page)

**Option:**

✦ ( )		3	<input type="checkbox"/>		
✦ ( )		3	<input type="checkbox"/>		



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: FASHION DESIGN

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
ARTH-101	Arts & Culture: History of Western Art I	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>		
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**Major Courses – 12 credits**

VSDS-101	Visual Studies: Design (Fall)	3	<input type="checkbox"/>		
DRAW-101	Drawing I (Fall)	3	<input type="checkbox"/>		
DRAW-206	Drawing II: Figure Drawing (Spring)	3	<input type="checkbox"/>	(DRAW-101)	
ARTH-102	History of Western Art II (Spring)	3	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 3 credits**

WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>		
	<small>[WRTG-215 Writing Seminar II for Design recommended]</small>				

**DEC Systems - 3 cr**

DECSYS-2( )	<small>(Select one DECSYS)</small>	3	<input type="checkbox"/>		
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**DEC Frameworks - 3 cr**

DECFRM-200	Business Models	3	<input type="checkbox"/>		
	<small>(DEC-101)</small>				

**Major Courses – 21 credits**

FASHDES-252	Fashion Design Research (Fall)	3	<input type="checkbox"/>		
TEXT-101	Survey of the Textile Industry (Fall)	3	<input type="checkbox"/>	(DRAW-206, VSDS-101)	
FASHDES-211	Garment Structures (Fall)	3	<input type="checkbox"/>		
FASHDRW-207	Fashion Figure Drawing (Fall)	3	<input type="checkbox"/>	(DRAW-206)	
CAD-204	CAD for Fashion Design (Spring)	3	<input type="checkbox"/>	(FASHDES-252, FASHDRW-207)	
FASHDES-213	Pattern Development I (Spring)	3	<input type="checkbox"/>	(FASHDES-211*)	
ARTH-314	History of Costume & Textiles (Spring)	3	<input type="checkbox"/>		
	<small>(FASHDES-252 or DSGNFND-423 or DSGNFND-203)</small>				

**LEVEL II THIRD YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	3	<input type="checkbox"/>		
HUMN-2( )	Humanities I	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114)	
( )	Language or Area Studies II	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114 for Area Studies only)	

**DEC Methods - 3 credits**

DECMTHD-3( )	<small>(Select one DECMTHD)</small>	3	<input type="checkbox"/>		
	<small>(Soc Sci I and Writing II)</small>				



PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: GRAPHIC DESIGN COMMUNICATION**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I. (FIRST YEAR): 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses: 12-14 credits**

WRTG-101/101G Writing Seminar I	3	<input type="checkbox"/>			
HIST-114 Historical Understanding: American Transitions	3	<input type="checkbox"/>			
MATH-1( ) Quantitative Reasoning I. (Select one, from 2-course option below)	3-4	<input type="checkbox"/>			
( ) Quantitative Reasoning II or Free Elective (See below)	3-4	<input type="checkbox"/>			

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro. to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101 Finite Mathematics (3cr.)	MATH-102 Pre-calculus (3 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I. (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I. (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II. (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I. (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service: 1 credit** (Select one, from 1-credit option below)

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>			
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>			

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101 Integrative Design Process	3	<input type="checkbox"/>			
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**Graphic Design Major Courses: 15 credits**

DSGNFND-103 Design Foundations I (Fall)	3	<input type="checkbox"/>			
ARTH-101 History of Western Art I (Fall)	3	<input type="checkbox"/>			
DSGNFND-203 Design Foundations II (Spring)	3	<input type="checkbox"/>	(DSGNFND-103)		
VSDRW-101 Visual Studies: Drawing (Spring)	3	<input type="checkbox"/>			
ARTH-102 History of Western Art II (Spring)	3	<input type="checkbox"/>			

**LEVEL II. (SECOND YEAR): 32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses: 12 credits**

WRTG-2( ) Writing Seminar II <small>(WRTG-215 Writing Seminar II. for Design recommended)</small>	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114)		
HUMN-2( ) Humanities I	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114)		
( ) Science	3	<input type="checkbox"/>			

**DEC Systems - 3 credits**

DECSYS-2( ) <small>(Select one DECSYS)</small>	3	<input type="checkbox"/>			
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**DEC Frameworks/Business Core - 3 credits**

DECFRM-200 Business Models	3	<input type="checkbox"/>	(DECPROC-101)		
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**Graphic Design Major Courses: 17 credits**

GRAPH-201 Design III for Graphic Design (Fall)	4	<input type="checkbox"/>	(DSGNFND-203* or VSDES-101*)		
GRAPH-202 Design IV for Graphic Design (Spring)	4	<input type="checkbox"/>	(GRAPH-201*)		
PHOTO-204 Intro. to Photography for Graphic Design	3	<input type="checkbox"/>	(GRAPH-201)		
INDD-324 History of Design & Communications	3	<input type="checkbox"/>	(ARTH-102)		
GRAPH-208 History of Graphic Design	3	<input type="checkbox"/>	(TBA)		

**LEVEL III. (THIRD YEAR): 32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses: 15 credits**

SOC-2( ) Social Sciences I	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114)		
( ) Language or Area Studies	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114 for Area Studie)		
( ) Language or Area Studies	3	<input type="checkbox"/>	(WRTG-101/101G, HIST-114 for Area Studie)		
JSLA-3( ) Junior Seminar	3	<input type="checkbox"/>	(Soc Sci I and Writing II)		

**DEC Methods - 3 credits**

DECMTHD-3( ) <small>(Select one DECMTHD)</small>	3	<input type="checkbox"/>	(Soc Sci I and Writing II)		
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**LEVEL III (THIRD YEAR): continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Graphic Design Major Courses: 14 credits**

GRAPH-301	Design V for Graphic Design (Fall)	(GRAPH-202*)	4	<input type="checkbox"/>		
GRAPH-302	Design VI for Graphic Design (Spring)	(GRAPH-301*)	4	<input type="checkbox"/>		
DIGD-206	Foundation in Web Design & Strategy	(GRAPH-202)	3	<input type="checkbox"/>		
( )	Graphic Design Designated Elective	(GRAPH-202)	3	<input type="checkbox"/>		

**Business Core: 3 credits**

MKTG-104	Marketing Foundations		1.5	<input type="checkbox"/>		
MGMT-104	Management Foundations		1.5	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR): 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses: 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		
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*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Graphic Design Major Courses: 18 credits**

GRAPH-401	Design VII for Graphic Design (Fall)	(GRAPH-302*)	6	<input type="checkbox"/>		
** GRAPH-499	Design VII Capstone in Graphic Design (Spring)	(GRAPH-401*)	6	<input type="checkbox"/>		
( )	Graphic Design Designated Elective	(GRAPH-202)	3	<input type="checkbox"/>		
( )	Graphic Design Designated Elective	(GRAPH-202)	3	<input type="checkbox"/>		

**Free Electives: 6 credits**

( )			3	<input type="checkbox"/>		
( )			3	<input type="checkbox"/>		

**Business Core: 3 credits**

MKTG-310	Intregated Marketing Communications	(MKTG-104, DECPROC-101, DECFRM-200)	3	<input type="checkbox"/>		
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**TOTAL CREDITS: 126-128 credits**

**\*\*satisfies DEC capstone requirement**

\* A grade of "C" or better is required to advance from one design studio into the next, Design III through Design VIII Capstone in Graphic Design Communication. Students interested in the joint BS/MBA option should consult their advisor after reading the section in the catalog on the Pre-MBA Minor for Non-Business Majors.

**Graphic Design Designated Electives:** (grade of "C" (2.00) or better earned in GRAPH-202 Design VI for Graphic Design)

- Graphic Design:** GRAPH-300, GRAPH-305, GRAPH-310, GRAPH-320, GRAPH-341, GRAPH-381, GRAPH-407, GRAPH-408, GRAPH-409, DSGN-371.
- Digital Design:** DIGD-307, DIGD-312, DIDG-403, DIGD-405, DIGD-406.
- Drawing:** DRAW-206, DRAW-301, DRAW-303.
- Industrial Design:** INDD-205.
- Architecture:** ADFND-101, ADFND-102, ADFND-104, ADFND-110, ARCHDSN-208, ARCHDSN-214, ARCH-326.
- Fashion Design:** FASHDRW-207, FASHDRW-317, FASHDRW-319.
- Photography:** PHOTO-101, PHOTO-102, PHOTO-201, PHOTO-302, PHOTO-303, PHOTO-307.
- Print:** CAD-201, PRINT-101, PRINT-301, PRINT-303, PRINT-315.

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits - 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: INTERACTIVE DESIGN & MEDIA

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WR TG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science I	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 12 credits**

DSGNFND-103	Design Foundations I (Fall)	3	<input type="checkbox"/>	_____	_____
DSGNFND-203	Design Foundations II (Spring)	3	<input type="checkbox"/>	_____	_____
VSDRW-101	Visual Studies: Drawing (Fall)	3	<input type="checkbox"/>	_____	_____

**Designated IDM Elective:** Select one, 3-credit course from the following - DRAW-201, DRAW-206, ADFND-104

( )	_____	3	<input type="checkbox"/>	_____	_____
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**LEVEL II (SECOND YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

ARTH-101.....	Arts & Culture: History of Western Art I	3	<input type="checkbox"/>	_____	_____
.....OR.....ARTH-102	History of Western Art II			_____	_____
SOC-2( )	Social Sciences I	3	<input type="checkbox"/>	_____	_____
WR TG-2( )	Writing Seminar II	3	<input type="checkbox"/>	_____	_____

[WR TG-215 Writing Seminar II for Design recommended]

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks/Business Core - 3 credits**

DECFRM-200	Business Models	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 11 credits**

GRAPH-201	Design III for Graphic Design (Fall only)	4	<input type="checkbox"/>	_____	_____
GRAPH-202	Design IV for Graphic Design (Spring only)	4	<input type="checkbox"/>	_____	_____

**Interactive Design & Media Core**

DIGD-206	Foundations in Web Design & Strategy	3	<input type="checkbox"/>	_____	_____
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**Business Core - 6 credits**

MKTG-104	Marketing Foundations	1.5	<input type="checkbox"/>	_____	_____
MGMT-104	Management Foundations	1.5	<input type="checkbox"/>	_____	_____
MKTG-408	Survey of E-Commerce	3	<input type="checkbox"/>	_____	_____

\* A grade of "C" or better is required in these prerequisites.

**LEVEL III (THIRD YEAR)- 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR)- continued**

**DEC Methods - 3 credits**

DECMTHD-3( ) (Select one DECMTHD) (Soc Sci I and Writing II) 3

**Major Courses – 17 credits**

**Interactive Design & Media Core**

DIGD-301 Interactive Design I (Fall only) (GRAPH-202 or ARCH-202, admission to IDM Program) 5

DIGD-302 Interactive Design II (Spring only) (GRAPH-202 or ARCH-202) 5

DIGD-305 Theory of Electronic Comm. Seminar (Fall) (admission to IDM Program) 3

DIGD-406 Actionscript 3.0 (Spring) (DIGD-301) 3

**Designated IDM Elective**

Select one, 3-credit course from the following - DIGD-307, DIGD-310, DIGD-312, DIGD-405, DIGD-415, GRAPH-341

( ) \_\_\_\_\_ (DIGD-206) 3

**Free Elective - 3 credits**

( ) \_\_\_\_\_ 3

**LEVEL IV (FOURTH YEAR) - 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

( ) Language or Area Studies (WRTG-101/101G , HIST-114 for Area Studies only) 3

COLLST-499 Contemporary Perspectives 4

(Humanities I, one Language/Area Studies, one Junior Seminar)

**Major Courses – 23 credits**

**Interactive Design & Media Core**

DIGD-403 Web Development (Fall) (DIGD-301 or DIGD-307) 3

DIGD-401 Interactive Design III (Fall only) (DIGD-302) 5

\*\* DIGD-498 Capstone Project Preparation (Fall only) (DIGD-302) 3

\*\* DIGD-499 Interactive Design IV: Capstone (Spring only) (DIGD-401\* and DIGD-498\*) 5

**Designated IDM Electives**

Select two more 3-credit course from the following - DIGD-307, DIGD-310, DIGD-312, DIGD-405, DIGD-415, DIGD-341

( ) \_\_\_\_\_ (DIGD-206\*) 3

( ) \_\_\_\_\_ (DIGD-206\*) 3

\* A grade of "C" or better is required in these prerequisites.

**Free Elective - 3 credits**

( ) \_\_\_\_\_ 3

**TOTAL CREDITS: 129-131 credits**

\*\* Satisfies DEC capstone requirement

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099 Fundamentals of College Mathematics (must earn C or better) 3

READ-099 Fundamentals of College Reading & Study Skills (must earn C or better) 3

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies “menu” of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: INDUSTRIAL DESIGN

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-17 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
ARTH-101	Arts & Culture: History of Western Art I	3	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101 Finite Mathematics (3cr.)	MATH-102 Pre-calculus (3 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>	

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process – 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>		
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**Major Courses – 14 credits**

INDD-101	Design I for Industrial Design (Fall)	4	<input type="checkbox"/>		
INDD-102	Design II for Industrial Design (Spring) <span style="float: right;">(INDD-101*)</span>	4	<input type="checkbox"/>		
CAD 206	CAD 1 for Industrial Design	3	<input type="checkbox"/>		
INDD-106	Materials and Process: Fabrication	3	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

PHYS-101	Science: Physics <span style="float: right;">(Quantitative Reasoning I)</span>	3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>		
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models <span style="float: right;">(DEC-101 Integrative Design Process)</span>	3	<input type="checkbox"/>		
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**Major Courses – 14 credits**

INDD-201	Design III for Industrial Design (Fall) <span style="float: right;">(INDD-102 *)</span>	4	<input type="checkbox"/>		
INDD-202	Design IV for Industrial Design (Spring) <span style="float: right;">(INDD-201*)</span>	4	<input type="checkbox"/>		
VSDRW-101	Visual Studies: Drawing	3	<input type="checkbox"/>		
ARTH-102	History of Western Art II	3	<input type="checkbox"/>		

At the end of the sophomore year students will undergo a rigorous review of their portfolios. Students will be required to demonstrate an understanding of fundamental design principles, must effectively apply required knowledge in the design process and must demonstrate competence in basic communication, documentation, mechanical drawing and free-hand drawing skills. Before entering the junior year, students should carefully consider how they will use the electives in the curriculum. At this time a summer internship (Course DIGD-493, D&M Internship) is a useful experience. To secure an internship a good portfolio must be prepared. The search for a position should start before the beginning of April.

**LEVEL III (THIRD YEAR)- 34 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
JSLA-3( )	Junior Seminar <span style="float: right;">(Soc Sci I and Writing II)</span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**DEC Methods - 3 credits**

DECMTHD-3( ) (Select one DECMTHD) (Soc Sci I and Writing II) 3

**Major Courses – 22 credits**

INDD-301	Design V for Industrial Design (Fall)	(INDD-202*)	4	<input type="checkbox"/>		
INDD-302	Design VI for Industrial Design (Spring)	(INDD-301*)	6	<input type="checkbox"/>		
INDD-207	Materials and Process: Manufacturing	(INDD-102)	3	<input type="checkbox"/>		
INDD-210	Ergonomic Studies	(INDD-106)	3	<input type="checkbox"/>		
INDD-324	Hist. of Design & Communication		3	<input type="checkbox"/>		
DRAW-301	Drawing: Design & Development	(VSDRW-101, INDD-102)	3	<input type="checkbox"/>		

At this time a summer internship (Course DIGD-493, D&M Internship) is a useful experience. To secure an internship a good portfolio must be prepared. The search for a position should start before the beginning of April.

**LEVEL IV (FOURTH YEAR) - 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499 Contemporary Perspectives 4   
 (Humanities I, one Language/Area Studies, one Junior Seminar)

**Major Courses – 21 credits**

INDD-401	Design VII for Industrial Design (Fall)	(INDD-302*)	6	<input type="checkbox"/>		
INDD-304	Design History/Theory	(INDD-324 or Permission)	3	<input type="checkbox"/>		
INDD-493	Professional Practice I (Fall)	(INDD-302*)	3	<input type="checkbox"/>		
** INDD-402	Design VIII for Industrial Design (Spring)	(INDD-401*, concurrent enrollment in INDD-494)	6	<input type="checkbox"/>		
INDD-494	Professional Practice II (Spring)	(INDD-401*, INDD-493*, concurrent enrollment in INDD-402)	3	<input type="checkbox"/>		

**Free Electives - 6 credits**

( ) 3   
 ( ) 3

**TOTAL CREDITS: 130-132 credits**

\* A grade of "C" or better is required to advance from one design studio into the next, Design I through Design VIII.

\*\* Satisfies DEC capstone requirement

⚡ **Recommended Free Electives:** CAD-306 CAD II Digital Design Techniques and INDD-205 Rendering for Industrial Design. Also: GRAPH-310 Digital Imaging (Photoshop), PHOTO-301 Studio Photography, DIGD-312 Multimedia Design, DIGD-405 Digital Video Design and Production. DIGD-415 Modeling and Animation, ENGR-210 Introduction to Materials Science

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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PHILADELPHIA UNIVERSITY

BACHELOR of SCIENCE in ENGINEERING: MECHANICAL ENGINEERING

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 22 credits**

WR TG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
CHEM-103/103L	Science I: Chemistry I w/ Lab		4	<input type="checkbox"/>	_____	_____
PHYS-201/201L	Science II: Physics I w/ Lab (Spring)	(pre-or co-requisite MATH-112)	4	<input type="checkbox"/>	_____	_____
MATH-111	Calculus I (Fall)		4	<input type="checkbox"/>	_____	_____
	[MATH-102 Pre-calculus may be required prior to taking MATH-111]					
MATH-112	Calculus II (Spring)	(MATH-111)	4	<input type="checkbox"/>	_____	_____

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives.

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process		3	<input type="checkbox"/>	_____	_____
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**Engineering Courses – 9 credits**

ENGR-101	Introduction to Engineering (Fall)		3	<input type="checkbox"/>	_____	_____
ENGR-102	Engineering Drawing (Spring)	(MATH-102 or MATH-111)	3	<input type="checkbox"/>	_____	_____
ENGR-104	Introduction to Computing (Spring)		3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

SOC-2( )	Social Sciences I	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WR TG-2( )	Writing Seminar II	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
	[WR TG-217 Writing Seminar II for Science & Engineering recommended]					

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)		3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	(DECPROC-101 )	3	<input type="checkbox"/>	_____	_____
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**Engineering Courses – 23 credits**

PHYS-203/203L	Physics II w/ Lab (Fall)	(PHYS-201/201L)	4	<input type="checkbox"/>	_____	_____
MATH-213	Calculus III (Fall)	(MATH-112)	4	<input type="checkbox"/>	_____	_____
ENGR-215	Engineering Statics (Fall)	(PHYS-201/201L; pre- or co-requisite MATH-213)	3	<input type="checkbox"/>	_____	_____
MATH-225	Differential Equations (Spring)	(MATH-213)	3	<input type="checkbox"/>	_____	_____
ENGR 301	Mechanics of Materials (Spring)	(ENGR-215)	3	<input type="checkbox"/>	_____	_____
ENGR-305	Engineering Statistics I (Spring)	( MATH-112)	3	<input type="checkbox"/>	_____	_____
ENGR-210	Introduction to Material Science (Fall)	(MATH-111, CHEM-103/103L)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 6 credits**

HUMN-2( )	Humanities I	(Soc Sc I and Writing II)	3	<input type="checkbox"/>	_____	_____
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
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**Engineering Courses – 21 credits**

ENGR-218	Engineering Dynamics (Fall)	(ENGR-215; pre- or co-requisite MATH-225)	3	<input type="checkbox"/>	_____	_____
ENGR-314	Numerical Methods for Engineers (Fall)	(MATH-225, ENGR-104)	3	<input type="checkbox"/>	_____	_____
ENGR-322	Fund. of Electrical Engineering I (Spring)	(PHYS-203/203L)	3	<input type="checkbox"/>	_____	_____
ENGR-311	Fluid Mechanics (Spring)	(ENGR-218)	3	<input type="checkbox"/>	_____	_____
ENGR-308	Integrated Engr Product Development	(MATH-112, ENGR-104, ENGR-102)	3	<input type="checkbox"/>	_____	_____
ENGR 407	Thermodynamics and Heat Transfer I	(PHYS-201/201L, MATH-112)	3	<input type="checkbox"/>	_____	_____
MENGR-301	Machine Design (Spring)	(ENGR-218)	3	<input type="checkbox"/>	_____	_____



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: TEXTILE DESIGN

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 32-34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12-14 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3 cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 19 credits**

TEXT-101	Survey of the Textile Industry (Fall)	3	<input type="checkbox"/>	_____	_____
DRAW-101	Drawing I (Fall)	3	<input type="checkbox"/>	_____	_____
VSDS-101	Visual Studies: Design	3	<input type="checkbox"/>	_____	_____
DRAW-303	Adv. Drawing: Material & Techniques(Spring)	3	<input type="checkbox"/>	_____	_____
KNIT-201	Knit Technology I	4	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

CHEM-101	Science: General Chemistry	3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>	_____	_____

[WRTG-215 Writing Seminar II for Design recommended]

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	3	<input type="checkbox"/>	_____	_____
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(DEC-101 Integrative Design Process)

**Major Courses – 16 credits**

WEAV-201	Weave Technology I	4	<input type="checkbox"/>	_____	_____
WEAV-207	Weave Design Studio I (Spring)	3	<input type="checkbox"/>	_____	_____
KNIT-203	Knit Design Studio I (Fall)	3	<input type="checkbox"/>	_____	_____
TEXT-391	Textile Design Research (Fall)	3	<input type="checkbox"/>	_____	_____
CAD-201	Introduction to Digital Imaging (Spring)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - 32 -33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

ARTH-101	Arts & Culture: History of Western Art I	3	<input type="checkbox"/>	_____	_____
HUMN-2( )	Humanities I	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____

(WRTG-101/101G, HIST-114)

(WRTG-101/101G, HIST-114 for Area Studies only)

**DEC Methods - 3 credits**

DECMTHD-3( )	(Select one DECMTHD)	3	<input type="checkbox"/>	_____	_____
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(Soc Sci I and Writing II)





PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: TEXTILE MATERIALS TECHNOLOGY**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 32-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 15-18 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science: CHEM-101 or CHEM-103/L	3-4	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**DEC Process - 3 credits**

DECPROC-101	Integrative Design Process	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 13 credits**

TEXT-104	Fiber & Yarn Studies (Fall)	3	<input type="checkbox"/>	_____	_____
KNIT-201.....	Knit Technology I (Spring)	4	<input type="checkbox"/>	_____	_____
.....OR.....WEAV-201	Weave Technology I (Spring)			_____	_____
CAD-201.....	Introduction to Digital Imaging (Spring)	3	<input type="checkbox"/>	_____	_____
.....OR.....ENGR-102	Engineering Drawing (Spring)			_____	_____
ENGR-104	Introduction to Computers (Spring)	3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 33-34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

( )	Science II: PHYS-101, PHYS-201/L, or CHEM-104/L	3-4	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>	_____	_____
( )	Social Sciences I	3	<input type="checkbox"/>	_____	_____

**DEC Systems - 3 credits**

DECSYS-2( )	(Select one DECSYS)	3	<input type="checkbox"/>	_____	_____
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**DEC Frameworks - 3 credits**

DECFRM-200	Business Models	3	<input type="checkbox"/>	_____	_____
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**Major Courses – 17 credits**

WEAV-201.....	Weave Technology I (Fall or Spring)	4	<input type="checkbox"/>	_____	_____
.....OR.....KNIT-201	Knit Technology I (Fall or Spring)			_____	_____
KNIT-205.....	Knit Technology II (Fall or Spring)	4	<input type="checkbox"/>	_____	_____
.....OR.....WEAV-301	Weave Technology II (Fall or Spring)			_____	_____
TEXTCHM-338	Organic/Textile Chemistry (Spring)	4	<input type="checkbox"/>	_____	_____
(Concentration)	_____	3	<input type="checkbox"/>	_____	_____
(Concentration)	_____	3	<input type="checkbox"/>	_____	_____



**Concentrations - (5 courses)**

<b>Sports &amp; High Performance Materials</b> (Pre- M.S. Textile Engineering option)	<b>Textile Conservation &amp; Forensics</b> (this option assumes completion of CHEM103 & 104; ARTH-101 or 102)
WEAV-226 Jacquard (4 cr) KNIT-307 Adv Warp Knit (4 cr) KNIT-326 Adv Weft Knit PHYS-201/201L Physics I (4 cr) (if not used in College Studies core) PHYS-203/203L Physics II (4 cr) TEXT-325 Fibrous Composite Materials ENGR-102 Engineering Drawing (if not used in major Core) ENGR-210 Intro to Materials Science TEXT-305 Adv Fabric Performance Evaluation INDD-210 Ergonomic Studies STAT-301 Biostatistics (C or better in MATH-111 or -112) .....OR.....STAT-201 & STAT-202 FASHMGT-201 Prototyping (formerly Garment Development) Internship/Research (discipline appropriate) Internship/Research (discipline appropriate) ( ) Adv. Elective (discipline appropriate) (Maximum of three graduate courses; may not duplicate UG equivalent) TXE-622 Mechanics of Textiles TXE-625 Biomaterials Technology TXE-754 Industrial & Specialty Fabrics OCC-613 Functional Anatomy (OCC-614 co-requisites) OCC-614 Pathological Conditions (OCC-614 Co-requisites)	BIOL-103/103L Biology I (4 cr) BIOL-104/104L Biology II (4 cr) CHEM-206 Forensic Chemistry (4 cr) ARCH-466 Preservation Technology ARTH-314 History of Textiles and Costumes ECBIO-101 Environmental Issues STAT-301 Biostatistics (C or better in MATH-111 or -112) CHEM-323 Instrumental Methods of Analysis (4 cr) Internship/Research (discipline appropriate) Internship/Research (discipline appropriate) ( ) Adv. Elective (discipline appropriate) (3-4 cr)
	<b>Product Safety &amp; Materials Evaluation</b> (this option assumes completion of CHEM-103 & -104)
	STAT-201 Statistics I STAT-202 Statistics II TEXT-305 Adv Fabric Performance Evaluation TEXT-315 Interior Fabric Performance (4 cr) PRINT-305 Textile Printing Technology ECBIO-101 Environmental Issues CHEM-417 Environmental Chemistry (4 cr) CHEM-305 Bio-organic Chemistry FASHMGT-201 Prototyping (formerly Garment Development) COLOR-XXX Color Science & Technology Internship/Research (discipline appropriate) Internship/Research (discipline appropriate) ( ) Adv. Elective (discipline appropriate) (3-4 cr) (Maximum of two graduate courses; may not duplicate UG equivalent) TXE-625 Biomaterials Technology
<b>Commerce</b>	<b>Sustainability</b> (Pre- M.S. Sustainable Design option)
*MGMT-XXX Mgmt Fund. <u>and</u> MKTG-XXX Mktg. Fund. (ea. 1.5 cr) MGMT-307 International Management MKTG-324 International Marketing *BLAW-301 Business Law I *MGMT-401 Operations Management * MBF-508..... Statistical Analysis for Decision Making .....OR.....STAT-201 & STAT-202 * MBF-503 Foundation of Economic Analysis (substitute for major core economic requirements) ECON-401 International Economics * MBF-504 Intro Financial & Managerial Accounting .....OR.....ACCT-102 & ACCT-102 FINC-301 Financial Management FINC-318 International Finance & Development Internship/Research (discipline appropriate) Internship/Research (discipline appropriate) ( ) Adv. Elective (discipline appropriate) * MBA-625 Management Comm. & Negotiations * MBA-628 Accounting for Management Decisions * (Comprises a <b>Pre-MBA</b> Concentration; min. GPA & acceptance into the MBA program)	SUST-100 Intro to Sustainability SUST-121 The Environment & World Culture SUST-200 Energy Systems & Politics SUST-204 Sustainable Planning & Land Use SUST-202 Economics of Sustainability SUST-302 Industrial Ecology SUST-303 Global Environmental History SUST-421 Environmental Policy SUST-400 Sust & Dev in the Non-Western World SUST-4XX Managing Sustainable Organizations ECBIO-101 Environmental Issues CHEM-417 Environmental Chemistry (4 cr) Internship/Research (discipline appropriate) Internship/Research (discipline appropriate) ( ) Adv. Elective (discipline appropriate)

PHILADELPHIA UNIVERSITY

BACHELOR OF SCIENCE: PROFESSIONAL COMMUNICATION

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
( )	Arts & Culture		3	<input type="checkbox"/>	_____	_____
( )	Science I		3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, \_\_\_\_\_ and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Core - 12 credits**

PSYCH-101	Introduction to Psychology		3	<input type="checkbox"/>	_____	_____
CAD-201	Computer Aided Design		3	<input type="checkbox"/>	_____	_____

**Communication Core**

COMM-100	Intro to Professional Communication		3	<input type="checkbox"/>	_____	_____
COMM-105	Design as Communication		3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

( )	Science II		3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	(WRTG-101/101 , HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G , HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**Major Core – 18 credits**

PSYCH-233	Interpersonal Relations	(PSYCH-101)	3	<input type="checkbox"/>	_____	_____
MKTG-102	Principles of Marketing		3	<input type="checkbox"/>	_____	_____
MKTG-207	Consumer in the Marketplace	(MKTG-102)	3	<input type="checkbox"/>	_____	_____

**Communication Core**

COMM-200	Reading the Visual	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____
COMM-204	Technologies of Communication	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____
COMM-202	Survey of Research Methods	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G , HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**Major Core - 18 credits**

MGMT-301	Principles of Management		3	<input type="checkbox"/>	_____	_____
MKTG-310	Integrated Marketing Communications	(MKTG-207)	3	<input type="checkbox"/>	_____	_____
MGMT-310	People and Teams in Organizations	(MGMT-301, junior status)	3	<input type="checkbox"/>	_____	_____

LEVEL III (THIRD YEAR) - continued

(Prerequisite) Cr Sem. Grade TR Equiv.

**Communication Core**

COMM-303	Technical Writing	(COMM-100)	3	<input type="checkbox"/>	_____	_____
COMM-307	Public Relations and Media Writing	(COMM-100)	3	<input type="checkbox"/>	_____	_____
COMM-305	Multimedia Presentation	(WRTG-101/101G)	3	<input type="checkbox"/>	_____	_____

LEVEL IV (FOURTH YEAR) – 31 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	_____	_____
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*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Major Core – 9 credits**

**Communication Core**

COMM-400	Usability Testing	(COMM-202, COMM-303)	3	<input type="checkbox"/>	_____	_____
COMM-404	Professional Comm Capstone Portfolio	(COMM-307, COMM-400)	3	<input type="checkbox"/>	_____	_____
COMM-402	Professional Ethics in Comm	(COMM-202, COMM-307)	3	<input type="checkbox"/>	_____	_____

**Minor Courses or Free Electives - 12 credits**

Minor Chosen \_\_\_\_\_

( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____

**Free Elective - 6 credits**

( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 122-124**

**Fundamentals Courses:** (Fundamental "099" courses do not count toward graduation requirements. However, WRTG-100 can be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____	_____
READ-099	Fundamentals of College Reading & Study Skills		3	<input type="checkbox"/>	_____	_____

**Surplus credits not used toward degree requirements**

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**Please note Philadelphia University residency requirement:**

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

PHILADELPHIA UNIVERSITY

BACHELOR OF SCIENCE: PROFESSIONAL COMMUNICATION

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
( )	Arts & Culture		3	<input type="checkbox"/>	_____	_____
( )	Science I		3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)		3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)		3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, \_\_\_\_\_ and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Core - 12 credits**

PSYCH-101	Introduction to Psychology		3	<input type="checkbox"/>	_____	_____
CAD-201	Computer Aided Design		3	<input type="checkbox"/>	_____	_____

**Communication Core**

COMM-100	Intro to Professional Communication		3	<input type="checkbox"/>	_____	_____
COMM-105	Design as Communication		3	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

( )	Science II		3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	(WRTG-101/101 , HIST-114)	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G , HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**Major Core – 18 credits**

PSYCH-233	Interpersonal Relations	(PSYCH-101)	3	<input type="checkbox"/>	_____	_____
MKTG-102	Principles of Marketing		3	<input type="checkbox"/>	_____	_____
MKTG-207	Consumer in the Marketplace	(MKTG-102)	3	<input type="checkbox"/>	_____	_____

**Communication Core**

COMM-200	Reading the Visual	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____
COMM-204	Technologies of Communication	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____
COMM-202	Survey of Research Methods	(WRTG-101/101G )	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G , HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**Major Core - 18 credits**

MGMT-301	Principles of Management		3	<input type="checkbox"/>	_____	_____
MKTG-310	Integrated Marketing Communications	(MKTG-207)	3	<input type="checkbox"/>	_____	_____
MGMT-310	People and Teams in Organizations	(MGMT-301, junior status)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Communication Core**

COMM-303	Technical Writing	(COMM-100)	3	<input type="checkbox"/>	_____	_____
COMM-307	Public Relations and Media Writing	(COMM-100)	3	<input type="checkbox"/>	_____	_____
COMM-305	Multimedia Presentation	(WRTG-101/101G)	3	<input type="checkbox"/>	_____	_____

**LEVEL IV (FOURTH YEAR) – 31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	_____	_____
<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>						

**Major Core – 9 credits**

**Communication Core**

COMM-400	Usability Testing	(COMM-202, COMM-303)	3	<input type="checkbox"/>	_____	_____
COMM-404	Professional Comm Capstone Portfolio	(COMM-307, COMM-400)	3	<input type="checkbox"/>	_____	_____
COMM-402	Professional Ethics in Comm	(COMM-202, COMM-307)	3	<input type="checkbox"/>	_____	_____

**Minor Courses or Free Electives - 12 credits**

Minor Chosen \_\_\_\_\_

( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____

**Free Elective - 6 credits**

( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 122-124**

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits...as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____	_____
READ-099	Fundamentals of College Reading & Study Skills		3	<input type="checkbox"/>	_____	_____

**Surplus credits not used toward degree requirements**

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Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies “menu” of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 23-25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Arts & Culture	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Health Sciences Core – 15 credits**

HSCI-100	Introduction to Health Professions (Fall)	1	<input type="checkbox"/>	_____	_____
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>	_____	_____
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>	_____	_____
BIOL-104	Biology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-103)</span>	3	<input type="checkbox"/>	_____	_____
BIOL-104L	Biology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-103L)</span>	1	<input type="checkbox"/>	_____	_____
PSYCH-100	Introduction to Psychology (Fall)	3	<input type="checkbox"/>	_____	_____
PSYCH-213	Developmental Psychology (Spring) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>	*	_____

**LEVEL II (SECOND YEAR) –32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I (SOC-201 or 204 recommended) <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>	*	_____
WRTG-217	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>	_____	_____

**Health Sciences Core – 14 credits**

STAT-221	Psych. Applied Statistics I (Spring) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>	*	_____
PSYCH-201	Abnormal Psychology (Fall) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>	_____	_____
HSCI-230	Clinical InteractionsI (Spring)				
BIOL-201	Anatomy & Physiology Lecture I (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>	*	_____
BIOL-201L	Anatomy & Physiology I Lab (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>	*	_____
BIOL-201	Anatomy & Physiology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>	*	_____
BIOL-201L	Anatomy & Physiology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>	*	_____

**HSC Elective** (Fall) Choose from options on next page

( )	_____	3	<input type="checkbox"/>	_____	_____
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**Free Elective** (Spring)

( )	_____	3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar (select JSLA-380, JSLA-391 or JSINT-384)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar (select JSLA-380, JSLA-391 or JSINT-384)	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	*	

(Humanities I, one Language/Area Studies, one Junior Seminar)

**Health Sciences Core – 18 credits**

PHYS-101	Science II: General Physics (Fall)	(MATH-1XX)	3	<input type="checkbox"/>	*	
HSCI-320	Clinical Interactions II (Fall)		3	<input type="checkbox"/>		
HSCI-330	Medical Terminology & Documentation (Spring)		3	<input type="checkbox"/>		
BIOL-209 or 315	Medicinal Plants or Immunology	(WRTG101/101G, HIST114, writing intensive)	3	<input type="checkbox"/>		

**HSC Electives** choose from options below

( )		(Spring)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		

**Free Elective - 3 credits**

( )		(Fall)	3	<input type="checkbox"/>		
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**HSC Electives:** [Select three] BIOL-207, BIOL-209, BIOL-221, BIOL-413, ECBIO-303, PSYCH-103, PSYCH-211, PSYCH-212, PYSCH-221, PSYCH-222, PSYCH-224, PSYCH-231, PSYCH-232, PSYCH-233, PSYCH-241, PSYCH-242

\*OT Program Prerequisites: BIOL-201, BIOL-202, PHYS-101, PSYCH-101, PSYCH-213, STAT-221, SOC-2XX & COLLST-499

**LEVEL IV (FOURTH YEAR) – 24 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

Students must complete all undergraduate major and college studies credits, earn overall 3.0 or higher GPA in undergraduate coursework, complete all OT Program prerequisite courses with minimum 3.0 GPA, and all OT Program admission steps prior to matriculating into graduate OT courses. Formal review of student's academic progress will occur at the end of the second and third years of undergraduate coursework. Students who do not meet OT Program academic standards will complete the B.S. in Health Sciences by taking additional electives, by advisement. The bachelor's degree requires a minimum of 120 credits.

**Occupational Therapy First Year Courses**

**Fall Semester (12 Credits)**

OCC-610	Portfolio Seminar		1	<input type="checkbox"/>		
OCC-611	Foundations for Practice		3	<input type="checkbox"/>		
OCC-613	Functional Anatomy		4	<input type="checkbox"/>		
OCC-621	Occupational Competence		3	<input type="checkbox"/>		
OCC-625	Clinical Skills A		1	<input type="checkbox"/>		

**Spring Semester (12 credits)**

OCC-616	Assistive Technology Design		2	<input type="checkbox"/>		
OCC-623	Applied Neuroanatomy		4	<input type="checkbox"/>		
OCC-628	Intro to Evaluation		1	<input type="checkbox"/>		
OCC-741	Interpersonal Relations & Groups		3	<input type="checkbox"/>		
OCC-645	Clinical Skills C		1	<input type="checkbox"/>		
OCC-735	Level I Fieldwork A		1	<input type="checkbox"/>		

(B.S. Awarded)

**TOTAL CREDITS: 120-123**



PHILADELPHIA UNIVERSITY  
**JOINT B.S. HEALTH SCIENCES / M.S. PHYSICIAN ASSISTANT STUDIES**  
 5-Year Program

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 23-25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
CHEM-103	Science I: Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Science I: Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Science II: Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Science II: Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Health Sciences Core – 9 credits**

HSCI-100	Introduction to Health Professions (Fall)	1	<input type="checkbox"/>		
CHEM-104	Chemistry II Lecture (Spring) <span style="float: right;">(CHEM-103)</span>	3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring) <span style="float: right;">(CHEM-103L)</span>	1	<input type="checkbox"/>		
BIOL-104	Biology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-103)</span>	3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-103L)</span>	1	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
WRTG-217	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		

**Health Sciences Core – 23 credits**

PSYCH-101	Introduction to Psychology (Fall)	3	<input type="checkbox"/>		
PSYCH-213	Developmental Psychology (Spring) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>		
CHEM-214	Biorganic Chemistry (Fall) <span style="float: right;">(CHEM-104/104L, C or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-201	Anatomy & Physiology Lecture I (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-201L	Anatomy & Physiology I Lab (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>		
BIOL-201	Anatomy & Physiology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-201L	Anatomy & Physiology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>		
BIOL-221	Microbiology Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-221L	Microbiology Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>		
HSCI-230	Introduction to Health Care (Spring)	2	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR) – 36 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

HUMN-2( )	Humanities I (Fall) <span style="float: right;">(WRTG-101/101, HIST-114)</span>	3	<input type="checkbox"/>		
JSLA-3( )	Junior Seminar (Fall) <span style="float: right;">(Soc Sci I and Writing II)</span>	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar (Spring) <span style="float: right;">(Soc Sci I and Writing II)</span>	3	<input type="checkbox"/>		
COLLST-499	Contemporary Perspectives (Spring)	4	<input type="checkbox"/>		

*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Health Sciences Core – 23 credits**

PSYCH-201	Abnormal Psychology (Fall)	(PSYCH-101)	3	<input type="checkbox"/>		
STAT-201	Statistics I for Business (Fall)	(Quantitative Reasoning I)	3	<input type="checkbox"/>		
BIOL-303	Histology (Fall)	(C- or better in BIOL-104/104L)	4	<input type="checkbox"/>		
HSCI-320	Clinical Interactions (Fall)		3	<input type="checkbox"/>		
BIOL-207	Principles of Genetics Lecture (Spring)	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>		
BIOL-207L	Principles of Genetics Lab (Spring)	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>		
BIOL-315	Immunology (Spring)	(BIOL-221/221L)	3	<input type="checkbox"/>		
HSCI-330	Medical Terminology & Documentation (Spring)		3	<input type="checkbox"/>		

**Professional Phase**

[Must be accepted into the Professional Phase in order to enroll in fourth year classes]

**LEVEL IV (FOURTH YEAR) – 20 cr (undergraduate) + 36 cr (graduate)**

(Prerequisite) Cr Sem. Grade TR Equiv.

Fall	PAS-407	Advanced Anatomy (Fall)	(BIOL-202)	5	<input type="checkbox"/>	
	PAS-421	Genetics, Immunology & Micro (Fall)	(BIOL-221)	2	<input type="checkbox"/>	
	PAS-413	Medical Physiology & Pathology (Fall)	(BIOL-202)	3	<input type="checkbox"/>	
	PAS-417	Medical Hist & Physical Diagnosis (Fall)		5	<input type="checkbox"/>	
	PAS-410	Medical & Professional Ethics		2	<input type="checkbox"/>	
Spring	PAS-411	Applied Behavioral Science		3	<input type="checkbox"/>	
	PAS-611	Clinical Medicine (Spring)	(PAS-407, PAS-413, PAS-417)	8	<input type="checkbox"/>	
	PAS-612	Clinical Reasoning (Spring)		2	<input type="checkbox"/>	
	PAS-613	Pharmacology & Pharmacotherapeutics (Spring)		4	<input type="checkbox"/>	
	PAS-614	Emergency Medicine (Spring)		3	<input type="checkbox"/>	
Summer	PAS-615	Laboratory Medicine (Spring)		2	<input type="checkbox"/>	
	PAS-621	Clinical Disciplines (Summer I)		6	<input type="checkbox"/>	
	PAS-622	Pharmacotherapeutics Seminar (Summer I)	(PAS-613)	1	<input type="checkbox"/>	
	PAS-624	Biomedical Literature & Research (Summer I)		3	<input type="checkbox"/>	
	PAS-623	Advanced Radiology/ECG Seminar (Summer)		1	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept (Summer II)		6	<input type="checkbox"/>	

**LEVEL V (FIFTH YEAR) – 57 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

Fall	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
Spring	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
Summer	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS0771	PA Master's Culminating Experience (over entire clinical year)		3	<input type="checkbox"/>	

**JOINT B.S. HEALTH SCIENCES / M.S. PHYSICIAN ASSISTANT STUDIES TOTAL CREDITS: 217-219 credits**

**Clinical Level - Rotation and Preceptorships (all 6 credits)**

- |   |   |
|---|---|
| PAS-741 Clinical Rotation: Medicine                 | PAS-759 Preceptorships IA: Primary Care 1     |
| PAS-742 Clinical Rotation: Pediatrics               | PAS-760 Preceptorships IB: Primary Care 2     |
| PAS-743 Clinical Rotation: Women's Health           | PAS-763 Preceptorships IIA: Floating Medicine |
| PAS-744 Clinical Rotation: Psychiatry/Mental Health | PAS-764 Preceptorships IIB: Elective          |
| PAS-745 Clinical Rotation: Surgery                  |   |
| PAS-746 Clinical Rotation: Emergency Medicine       |   |

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	

Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: PRE-MEDICAL STUDIES

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 21 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-111	Calculus I (Spring)	4	<input type="checkbox"/>		

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 8 credits**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103)	3	<input type="checkbox"/>	
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L)	1	<input type="checkbox"/>	
BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103)	3	<input type="checkbox"/>	
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L)	1	<input type="checkbox"/>	

**LEVEL II (SECOND YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

MATH-112	Calculus II (Fall)	(MATH-111)	4	<input type="checkbox"/>	
SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	
( )	Language or Area Studies	[WRTG-217 Writing Seminar II for Science recommended] (WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	

**Science Core – 19 credits**

CHEM-201	Organic Chemistry I (Fall)	(CHEM-104/104L)	3	<input type="checkbox"/>	
CHEM-201L	Organic Chemistry I Lab (Fall)	(CHEM-104/104L)	1	<input type="checkbox"/>	
CHEM-202	Organic Chemistry II (Spring)	(CHEM-201/201L)	3	<input type="checkbox"/>	
CHEM-202L	Organic Chemistry III Lab (Spring)	(CHEM-201/201L)	1	<input type="checkbox"/>	
STAT-301	Biostatistics (Fall)	(C (2.00) or better in MATH-111 or MATH-112)	3	<input type="checkbox"/>	

**Pre-Medical Core** (Select one, 4-credit option below for the Fall term)

BIOL-221	Microbiology Lecture	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	
BIOL-221L	Microbiology Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	
BIOL-207	Principles of Genetics	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	
BIOL-207L	Principles of Genetics Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	
BIOL-201	Anatomy & Physiology Lecture I	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	
BIOL-201L	Anatomy & Physiology I Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	
(Select one, 4-credit option below for the <u>Spring</u> term)					
BIOL-202	Anatomy & Physiology II Lecture	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	
BIOL-202L	Anatomy & Physiology II Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	
BIOL-221	Microbiology Lecture	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	
BIOL-221L	Microbiology Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	

**Summer Semester - 6 credits** (between sophomore & junior year)

BIOL-493	Preceptorship I	(C- or better in BIOL-104/104L; CHEM-104/104L, min. GPA 3.0)	3	<input type="checkbox"/>	
BIOL-494	Preceptorship II	(C- or better in BIOL-104/104L; CHEM-104/104L, min. GPA 3.0)	3	<input type="checkbox"/>	

**LEVEL III (THIRD YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	

**LEVEL III (THIRD YEAR) – continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Science Core – 16 credits**

PHYS-201	Physics I Lecture (Fall)	(MATH-112)	3	<input type="checkbox"/>	_____	_____
PHYS-201L	Physics I Lab (Fall)	(MATH-112)	1	<input type="checkbox"/>	_____	_____
PHYS-203	Physics II Lecture (Spring)	(PHYS-201/201L)	3	<input type="checkbox"/>	_____	_____
PHYS-203L	Physics II Lab (Spring)	(PHYS-201/201L)	1	<input type="checkbox"/>	_____	_____

**Pre-Medical Core**

(Select one, 4-credit option below for the Fall term)

BIOL-207	Principles of Genetics Lecture (Fall)	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	_____	_____
BIOL-207L	Principles of Genetics Lab (Fall)	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	_____	_____
BIOL-201	Anatomy & Physiology I Lecture (Fall)	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	_____	_____
BIOL-201L	Anatomy & Physiology I Lab (Fall)	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	_____	_____

(Select one, 4-credit option below for the Spring term)

BIOL-202	Anatomy & Physiology II Lecture	(C- or better in BIOL-201/201L)	3	<input type="checkbox"/>	_____	_____
BIOL-202L	Anatomy & Physiology II Lab	(C- or better in BIOL-201/201L)	1	<input type="checkbox"/>	_____	_____
BIOL-221	Microbiology	(C- or better in BIOL-104/104L)			_____	_____
BIOL-221L	Microbiology Lab	(C- or better in BIOL-104/104L)			_____	_____

**Free Electives - 6-8 credits (may be used toward Public Health, Psychology, Genetics, Business or Chemistry minors)**

( )	_____		3-4	<input type="checkbox"/>	_____	_____
( )	_____		3-4	<input type="checkbox"/>	_____	_____

**LEVEL IV (FOURTH YEAR) – 27-31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

For students NOT taking the Kaplan MCAT Prep course, the Language/Area Studies class may be moved from the Fall to the Spring semester to divide the credit load more evenly.

( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	_____	_____

(Humanities I, one Language/Area Studies, one Junior Seminar)

**Science Core – 14-16 credits**

**Pre-Medical Core**

BCHEM-312	Biochemistry I (Fall)	(CHEM-201/201L)	3	<input type="checkbox"/>	_____	_____
BCHEM-312L	Biochemistry I Lab	(CHEM-201/201L)	1	<input type="checkbox"/>	_____	_____
BCHEM-313	Biochemistry II (Spring)	(BCHEM-312 and 312L)	3	<input type="checkbox"/>	_____	_____
BCHEM-313L	Biochemistry II Lab	(BCHEM-312 and 312L)	1	<input type="checkbox"/>	_____	_____

**Designated Pre-Medical Electives:**

Fall Term: Select either ECBIO-319, BIOL-209♦, BIOL-303, BIOL-307\*, ECBIO-303\* or SCI-300

Spring Term: Select either BIOL-204/L, BIOL-315♦, BIOL-413, BIOL-401, CHEM-405, BIOL-302\*

( )	_____	(Fall)	3-4	<input type="checkbox"/>	_____	_____
( )	_____	(Spring)	3-4	<input type="checkbox"/>	_____	_____

**Free Electives - 6-8 credits (may be used toward Public Health, Psychology, Genetics, Business or Chemistry minors)**

( )	_____		3-4	<input type="checkbox"/>	_____	_____
( )	_____		3-4	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 126-132**

♦ Writing intensive or writing specific courses

\* Genetics courses that may be used as Pre-Medical Electives OR in the Genetics Minor but NOT BOTH

**Fundamentals Courses:** (Fundamental "099" courses do not count toward graduation requirements. However, WRTG-100 can be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____	_____
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	_____	_____

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: **BIOLOGY**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-111	Calculus I (Fall)	4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring)	4	<input type="checkbox"/>		

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 8 credits**

CHEM-104	Chemistry II Lecture (Spring)	3	<input type="checkbox"/>		
	<i>(CHEM-103)</i>				
CHEM-104L	Chemistry II Lab (Spring)	1	<input type="checkbox"/>		
	<i>(CHEM-103L)</i>				
BIOL-104	Biology II Lecture (Spring)	3	<input type="checkbox"/>		
	<i>(C- or better in BIOL-103)</i>				
BIOL-104L	Biology II Lab (Spring)	1	<input type="checkbox"/>		
	<i>(C- or better in BIOL-103L)</i>				

**LEVEL II (SECOND YEAR) – 28-29 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	3	<input type="checkbox"/>		
	<i>(WRTG-101/101G, HIST-114)</i>				
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>		
	<i>(WRTG-101/101G, HIST-114)</i>				
( )	Language or Area Studie	3	<input type="checkbox"/>		
	<i>(WRTG-101/101G, HIST-114 for Area Studies only)</i>				

**Science Core – 19-20 credits**

CHEM-201	Organic Chemistry I (Fall)	3	<input type="checkbox"/>		
	<i>(CHEM-104/104L)</i>				
CHEM-201L	Organic Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
	<i>(CHEM-104/104L)</i>				
CHEM-202	Organic Chemistry II (Spring)	3	<input type="checkbox"/>		
	<i>(CHEM-201/201L)</i>				
CHEM-202L	Organic Chemistry III Lab (Spring)	1	<input type="checkbox"/>		
	<i>(CHEM-201/201L)</i>				

**Biology Core**

☆ BIOL-205/205L.....	Plant Biology w/ Lab (Fall)	4	<input type="checkbox"/>		
	<i>(C- or better in BIOL-104/104L)</i>				
☆ .....OR.....ECBIO-101	Environmental Issues (Fall)	4	<input type="checkbox"/>		
	<i>(C- or better in BIOL-104/104L)</i>				
BIOL-204	Cell Biology Lecture (Spring)	3	<input type="checkbox"/>		
	<i>(C- or better in BIOL-104/104L)</i>				
BIOL-204L	Cell Biology Lab (Spring)	1	<input type="checkbox"/>		
	<i>(C- or better in BIOL-104/104L)</i>				

**Advanced Biology Electives** (Choose from the designated electives on the next page)

( )		3-4	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR) – 34-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	3	<input type="checkbox"/>		
	<i>(WRTG-101/101G, HIST-114)</i>				
( )	Language or Area Studie	3	<input type="checkbox"/>		
	<i>(WRTG-101/101G, HIST-114 for Area Studies only)</i>				
JSLA/JSINT-3( )	Junior Seminar	3	<input type="checkbox"/>		
	<i>(Soc Sci I and Writing II)</i>				
JSLA/JSINT-3( )	Junior Seminar	3	<input type="checkbox"/>		
	<i>(Soc Sci I and Writing II)</i>				

**Science Core – 22-23 credits**

PHYS-201	Physics I Lecture (Fall)	3	<input type="checkbox"/>		
	<i>(MATH-112)</i>				
PHYS-201L	Physics I Lab (Fall)	1	<input type="checkbox"/>		
	<i>(MATH-112)</i>				
PHYS-203	Physics II Lecture (Spring)	3	<input type="checkbox"/>		
	<i>(PHYS-201/201L)</i>				
PHYS-203L	Physics II Lab (Spring)	1	<input type="checkbox"/>		
	<i>(PHYS-201/201L)</i>				

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

STAT-301	Biostatistics (Fall)	(C [2.0] or better in MATH-111 or MATH-112)	3	<input type="checkbox"/>		
<b>Biology Core</b>						
BIOL-207	Principles of Genetics Lecture	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>		
BIOL-207L	Principles of Genetics Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>		
☆ ECBIO-301.....	Ecology (Fall)	(C- or better in either BIOL-104/104L or ECBIO-208)	4	<input type="checkbox"/>		
☆ .....0R.....BIOL-205/205L	Plant Biology w/ Lab (Fall)	(C- or better in BIOL-104/104L)				
<b>Advanced Biology Electives</b> (Choose from the designated electives below)						
⊕ ( )			3-4	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR) – 25-31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>		
<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>						

**Science Core – 12-15 credits**

<b>Biology Core</b>						
BIOL-411	Life Science Seminar	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>		
<b>Advanced Biology Electives</b> (Choose from the designated electives below)						
⊕ ( )			3-4	<input type="checkbox"/>		
⊕ ( )			3-4	<input type="checkbox"/>		
⊕ ( )			3-4	<input type="checkbox"/>		

**Free Electives - 9-12 credits**

( )			3-4	<input type="checkbox"/>		
( )			3-4	<input type="checkbox"/>		
( )			3-4	<input type="checkbox"/>		

**TOTAL CREDITS: 121-129**

☆ Courses will be offered every other year. See academic advisor for sequencing issues.

**⊕ Advanced Biology Electives** (Choose five from these designated electives)

Anat&Phys I&II (BIOL-201/201L, BIOL-202/202L), Public Health ECBIO-303, Med Plants BIOL-209, Microbiol BIOL-221/221L, Histol (BIOL-303), Dev Gen (BIOL-307), Bioch I&II (BCHEM-312/312L, BIOL-313/313L), Immunol (BIOL-315), Topics (BIOL-371), Research I&II (BIOL-391, BIOL-392), Molec Biol (BIOL-401), Comp Anat (BIOL-407), Cell Anal, Preceptorship I/II (BIOL-409), Biol 493/4, Biodiv (ECBIO-201), Loc Flora (ECBIO-208), Ecology (ECBIO-301), Expt Ecol (ECBIO-302), Wildlife Ecol (ECBIO-316), Oceanog (ECBIO-319), Plt Ecol (ECBIO-409), Nat Res Manag (ECBIO-415), Ind Study SCI-381/2, Basic Pharm SCI-300, Intern (SCI-493), STUAB-300

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: **BIOCHEMISTRY**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-111	Calculus I (Fall)	4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring)	4	<input type="checkbox"/>		

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 8 credits**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103) 3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L) 1	<input type="checkbox"/>		
BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103) 3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L) 1	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
( )	Language or Area Studie	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		

**Science Core – 23 credits**

MATH-213	Calculus III (Fall)	(MATH-112) 4	<input type="checkbox"/>		
STAT-301	Biostatistics (Fall)	(C or better in MATH-111 or MATH-112) 3	<input type="checkbox"/>		
PHYS-201	Physics I Lecture (Fall)	(MATH-112) 3	<input type="checkbox"/>		
PHYS-201L	Physics I Lab (Fall)	(MATH-112) 1	<input type="checkbox"/>		
PHYS-203	Physics II Lecture (Spring)	(PHYS-201/201L) 3	<input type="checkbox"/>		
PHYS-203L	Physics II Lab (Spring)	(PHYS-201/201L) 1	<input type="checkbox"/>		
CHEM-201	Organic Chemistry I (Fall)	(CHEM-104/104L) 3	<input type="checkbox"/>		
CHEM-201L	Organic Chemistry I Lab (Fall)	(CHEM-104/104L) 1	<input type="checkbox"/>		
CHEM-202	Organic Chemistry II (Spring)	(CHEM-201/201L) 3	<input type="checkbox"/>		
CHEM-202L	Organic Chemistry II Lab (Spring)	(CHEM-201/201L) 1	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
( )	Language or Area Studie	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II) 3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II) 3	<input type="checkbox"/>		

**Science Core – 20 credits**

BCHEM-312	Biochemistry I	(CHEM-202/202L) 3	<input type="checkbox"/>		
BCHEM-312L	Biochemisry Lab I	(CHEM-202/202L) 1	<input type="checkbox"/>		
BCHEM-313	Biochemistry II	(BCHEM-312) 3	<input type="checkbox"/>		
BCHEM-313L	Biochemistry Lab II	(BCHEM-312 and 312L) 1	<input type="checkbox"/>		
CHEM-305	Physical Chemistry I (Fall)	4	<input type="checkbox"/>		
	(CHEM-202/202L, PHYS-203/203L, and pre or co-requisite MATH-213)				
CHEM-306	Physical Chemistry II (Spring)	(CHEM-305) 4	<input type="checkbox"/>		

LEVEL IV (FOURTH YEAR) – 26-27 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499 Contemporary Perspectives 4  \_\_\_\_\_  
 (Humanities I, one Language/Area Studies, one Junior Seminar)

**Science Core – 13-14 credits**

**Chemistry Core**

CHEM-309 Inorganic Chemistry (Spring) (CHEM-306) 4  \_\_\_\_\_

**Advanced Chemistry/Biology Electives** (select from the designated electives below)

+ ( ) \_\_\_\_\_ 3-4  \_\_\_\_\_  
 + ( ) \_\_\_\_\_ 3  \_\_\_\_\_  
 + ( ) \_\_\_\_\_ 3  \_\_\_\_\_

**Free Electives - 9 credits**

( ) \_\_\_\_\_ 3  \_\_\_\_\_  
 ( ) \_\_\_\_\_ 3  \_\_\_\_\_  
 ( ) \_\_\_\_\_ 3  \_\_\_\_\_

**TOTAL CREDITS: 124-125**

+ **Advanced Chemistry/Biology Electives** (Select three of the following)

BIOL-204/204L (Cell Bio), BIOL-391/392 (Research), CHEM-391/391 (Research), SCI-381/381 (Ind Stdy),  
 SCI-300 (Pharmacology), CHEM-405 (Adv Organic)

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099 Fundamentals of College Mathematics (must earn C or better) 3  \_\_\_\_\_  
 READ-099 Fundamentals of College Reading & Study Skills (must earn C or better) 3  \_\_\_\_\_

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:  
 Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies “menu” of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: BIOPSYCHOLOGY

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 30-32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 19-21 credits**

WRTG-101/101	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 10 credits**

**Science Core**

BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103)	3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L)	1	<input type="checkbox"/>		

**Psychology Core**

PSYCH-101	Introduction to Psychology (Fall)	3	<input type="checkbox"/>		
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**Biological Basis of Behavior (BBB) Core**

PSYCH-103	Physiological Psychology	(PSYCH-101)	3	<input type="checkbox"/>		
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**LEVEL II (SECOND YEAR) – 29-31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)		3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)		1	<input type="checkbox"/>		

**Major Courses – 16-18 credits**

**Science Core**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103)	3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L)	1	<input type="checkbox"/>		

**Psychology Core**

STAT-221	Psych.Application of Statistics I (Spring)	(PSYCH-101)	3	<input type="checkbox"/>		
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**Biological Basis of Behavior (BBB) Core: (Select one of the followin) PSYCH-240, PSYCH-241, PSYCH-242**

( )		3	<input type="checkbox"/>		
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**Psychology Concentration Option (see next page)**

❖	( )		3-4	<input type="checkbox"/>		
❖	( )		3-4	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR)- 31-33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**Major Courses - 19-21 credits**

**Science Core**

BIOL-201	Anatomy & Physiology Lecture I	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>	_____	_____
BIOL-201L	Anatomy & Physiology I Lab	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>	_____	_____

**Psychology Core**

STAT-321	Psych. Application of Statistics II (Fall)	(STAT-221)	3	<input type="checkbox"/>	_____	_____
PSYCH-322	Intro to Experimental Psych (Spring)	(STAT-321)	3	<input type="checkbox"/>	_____	_____

**Biological Basis of Behavior (BBB) Core:** (Select one of the followin) PSYCH-240, PSYCH-241, PSYCH-242

( )	_____		3	<input type="checkbox"/>	_____	_____
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**Psychology Concentration Option** (see next page)

❖ ( )	_____		3-4	<input type="checkbox"/>	_____	_____
❖ ( )	_____		3-4	<input type="checkbox"/>	_____	_____

**LEVEL IV (FOURTH YEAR) - 31-37 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	_____	_____
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*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Major Courses – 18-21 credits**

**Psychology Core**

PSYCH-391	Adv. Research in Psychology (Fall)	(PSYCH-322 and 21 credits in psychology)	3	<input type="checkbox"/>	_____	_____
PSYCH-410	Senior Colloquium in Psychology(Spring)	(PSYCH-391)	3	<input type="checkbox"/>	_____	_____

**Biological Basis of Behavior (BBB) Core:** (Select one of the followin) PSYCH-240, PSYCH-241, PSYCH-242

( )	_____		3	<input type="checkbox"/>	_____	_____
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**Psychology Concentration Option** (see below)

❖ ( )	_____		3-4	<input type="checkbox"/>	_____	_____
❖ ( )	_____		3-4	<input type="checkbox"/>	_____	_____
❖ ( )	_____		3-4	<input type="checkbox"/>	_____	_____

**Free Electives - 9-12 credits**

( )	_____		3-4	<input type="checkbox"/>	_____	_____
( )	_____		3-4	<input type="checkbox"/>	_____	_____
( )	_____		3-4	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 121-133 credits**

❖ **Psychology Concentration Option** (See academic advisor *before* selecting one of the following)

**Pre-Med Option** (students must have taken MATH-111 & MATH-112 in the first year)  
 CHEM-201/201L, CHEM-202/202L, PHYS-201/201L, PHYS-203/203L, and three additional advanced courses from Biology and Psychology (see advisor)

**Animal Behavior Option**  
 BIOL-207/207L, ECBIO-201, ECBIO-301 and four advanced courses from Biology or Psychology areas (see advisor)

**Graduate Study Option**  
 Select seven advanced courses from Biology and Psychology areas (at least three from each area; see advisor)

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____	_____
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	_____	_____

Please note Philadelphia University residency requirement:  
 Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

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PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: CHEMISTRY

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 25 credits**

WR TG-10/101G1	Writing Seminar I		3	<input type="checkbox"/>	_____	_____
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>	_____	_____
( )	Arts & Culture		3	<input type="checkbox"/>	_____	_____
CHEM-103	Chemistry I Lecture (Fall)		3	<input type="checkbox"/>	_____	_____
CHEM-103L	Chemistry I Lab (Fall)		1	<input type="checkbox"/>	_____	_____
BIOL-103	Biology I Lecture (Fall)		3	<input type="checkbox"/>	_____	_____
BIOL-103L	Biology I Lab (Fall)		1	<input type="checkbox"/>	_____	_____
MATH-111	Calculus I (Fall)		4	<input type="checkbox"/>	_____	_____
MATH-112	Calculus II (Spring)	(MATH-111)	4	<input type="checkbox"/>	_____	_____

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 8 credits**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103)	3	<input type="checkbox"/>	_____	_____
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L)	1	<input type="checkbox"/>	_____	_____
BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103)	3	<input type="checkbox"/>	_____	_____
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L)	1	<input type="checkbox"/>	_____	_____

**LEVEL II (SECOND YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
WR TG-2( )	Writing Seminar II	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
		[WR TG-217 Writing Seminar II for Science recommended]				
( )	Language or Area Studies	(WR TG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____

**Science Core – 23 credits**

MATH-213	Calculus III (Fall)	(MATH-112)	4	<input type="checkbox"/>	_____	_____
STAT-301	Biostatistics (Fall)	(C or better in MATH-111 or MATH-112)	3	<input type="checkbox"/>	_____	_____
PHYS-201	Physics I Lecture (Fall)	(MATH-112)	3	<input type="checkbox"/>	_____	_____
PHYS-201L	Physics I Lab (Fall)	(MATH-112)	1	<input type="checkbox"/>	_____	_____
PHYS-203	Physics II Lecture (Spring)	(PHYS-201/201L)	3	<input type="checkbox"/>	_____	_____
PHYS-203L	Physics II Lab (Spring)	(PHYS-201/201L)	1	<input type="checkbox"/>	_____	_____
CHEM-201	Organic Chemistry I (Fall)	(CHEM-104/104L)	3	<input type="checkbox"/>	_____	_____
CHEM-201L	Organic Chemistry I Lab (Fall)	(CHEM-104/104L)	1	<input type="checkbox"/>	_____	_____
CHEM-202	Organic Chemistry II (Spring)	(CHEM-201/201L)	3	<input type="checkbox"/>	_____	_____
CHEM-202L	Organic Chemistry II Lab (Spring)	(CHEM-201/201L)	1	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) – 32 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WR TG-101/101G, HIST-114)	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	(WR TG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	_____	_____

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Science Core – 20 credits**

BCHEM-312	Biochemistry I	(CHEM-202/202L)	3	<input type="checkbox"/>	_____	_____
BCHEM-312L	Biochemistry Lab I	(CHEM-202/202L)	1	<input type="checkbox"/>	_____	_____
BCHEM-313	Biochemistry II	(BCHEM-312)	3	<input type="checkbox"/>	_____	_____
BCHEM-313L	Biochemistry Lab II	(BCHEM-312 and 312L)	1	<input type="checkbox"/>	_____	_____
CHEM-323	Instrumental Methods Analysis (Spring)	(CHEM-202/202L)	4	<input type="checkbox"/>	_____	_____
CHEM-305	Physical Chemistry I (Fall)	(CHEM-202/202L, PHYS-203/203L, and pre or co-requisite MATH-213)	4	<input type="checkbox"/>	_____	_____
CHEM-306	Physical Chemistry II (Spring)	(CHEM-305)	4	<input type="checkbox"/>	_____	_____

**LEVEL IV (FOURTH YEAR) – 26-27 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives		4	<input type="checkbox"/>	_____	_____
		(Humanities I, one Language/Area Studies, one Junior Seminar)				

**Science Core – 13-14 credits**

**Chemistry Core**

CHEM-309	Inorganic Chemistry (Spring)	(CHEM-306)	4	<input type="checkbox"/>	_____	_____
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**Advanced Chemistry Electives** (select from the designated electives below)

+ ( )	_____		3-4	<input type="checkbox"/>	_____	_____
+ ( )	_____		3	<input type="checkbox"/>	_____	_____
+ ( )	_____		3	<input type="checkbox"/>	_____	_____

**Free Electives – 9 credits**

( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____
( )	_____		3	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 124-125**

+ **Advanced Chemistry Electives** (Select three from these designated electives)

CHEM-371 (Spec Topics), CHEM-391/391 (Research), Chem-405 (Adv Organic), CHEM-410 (Polymer Chem), CHEM-417 (Env Chem), SCI-381/381 (Ind Stdy), SCI-300 (Pharmacology)

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits...as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____	_____
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	_____	_____

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: CHEMISTRY**  
 Environmental Science Concentration

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-111	Calculus I (Fall)	4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring)	4	<input type="checkbox"/>		

(MATH-111)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 8 credits**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103) 3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L) 1	<input type="checkbox"/>		
BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103) 3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L) 1	<input type="checkbox"/>		
ECBIO-101	Environmental Issues	3	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 28-29 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
	[WRTG-217 Writing Seminar II for Science recommended]				
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		

**Science Core – 23 credits**

PHYS-201	Physics I Lecture (Fall)	(MATH-112) 3	<input type="checkbox"/>		
PHYS-201L	Physics I Lab (Fall)	(MATH-112) 1	<input type="checkbox"/>		
PHYS-203	Physics II Lecture (Spring)	(PHYS-201/201L) 3	<input type="checkbox"/>		
PHYS-203L	Physics II Lab (Spring)	(PHYS-201/201L) 1	<input type="checkbox"/>		
CHEM-201	Organic Chemistry I (Fall)	(CHEM-104/104L) 3	<input type="checkbox"/>		
CHEM-201L	Organic Chemistry I Lab (Fall)	(CHEM-104/104L) 1	<input type="checkbox"/>		
CHEM-202	Organic Chemistry II (Spring)	(CHEM-201/201L) 3	<input type="checkbox"/>		
CHEM-202L	Organic Chemistry II Lab (Spring)	(CHEM-201/201L) 1	<input type="checkbox"/>		

**Advanced Environmental Elective** (select from the designated electives listed below)

+ ( )		3-4	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR) – 32-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

( )	Humanities I	(WRTG-101/101G, HIST-114) 3	<input type="checkbox"/>		
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only) 3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II) 3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II) 3	<input type="checkbox"/>		

BACHELOR OF SCIENCE: CHEMISTRY (2011-2012)  
Environmental Science Concentration - [Page 2]

**LEVEL III (THIRD YEAR) - continued**

*(Prerequisite)* Cr Sem. Grade TR Equiv.

**Science Core – 20-21 credits**

ECBIO-301	Ecology (Fall)	<i>(C- or better in either BIOL-104/104L or ECBIO-208)</i>	4	<input type="checkbox"/>		
STAT-301	Biostatistics (Fall)	<i>(C or better in MATH-111 or MATH-112)</i>	3	<input type="checkbox"/>		
CHEM-323	Instrmtl Methods Analysis (Spring)	<i>(CHEM-202/202L)</i>	4	<input type="checkbox"/>		
LARCH-310	GIS for Landscape Analysis (Fall)	<i>(ECBIO-301 or ARCHDSN-208)</i>	3	<input type="checkbox"/>		
ECBIO-415	Natural Resource Management (Spring)	<i>(ECBIO-301)</i>	3	<input type="checkbox"/>		

**Advanced Environmental Elective** (select from the designated electives listed below)

+ ( ) \_\_\_\_\_ 3-4

**LEVEL IV (FOURTH YEAR) – 26-28 credits**

*(Prerequisite)* Cr Sem. Grade TR Equiv.

**College Studies Courses – 7 credits**

ARTS-1( )	Arts & Culture		3	<input type="checkbox"/>		
COLLST-499	Contemporary Perspectives	<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>	4	<input type="checkbox"/>		

**Science Core – 10-12 credits**

**Chemistry Core**

CHEM-417	Environmental Chemistry (Fall)	<i>(CHEML-104/104L)</i>	4	<input type="checkbox"/>		
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**Advanced Environmental Electives** (select from the designated electives listed below)

+ ( ) \_\_\_\_\_ 3-4

+ ( ) \_\_\_\_\_ 3-4

**Free Electives - 6 credits**

( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		
( )	_____		3	<input type="checkbox"/>		

**TOTAL CREDITS: 120-124**

+ **Advanced Environmental Electives** (select four from these designated electives)

BIOL 205/205L, BIOL 209, BIOL 221/221L, BCHEM 312/313, BIOL 371, BIOL 391/392, CHEM 305/306, CHEM 309, CHEM 371, CHEM 391/392, CHEM 405, ECBIO 201, ECBIO 208, ECBIO 302, ECBIO 305, ECBIO 316, ECBIO 318, ECBIO 319, ECBIO 391/392, ECBIO 409, SCI-300, SCI 381/382, SCI 493, STUAB 300, EENGR 412, LARCH 412

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	<i>(must earn C or better)</i>	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	<i>(must earn C or better)</i>	3	<input type="checkbox"/>		

**Surplus credits not used toward degree requirements**

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 Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.*

*This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.*

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed



Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 22 credits**

WRTG-101/101G	Writing Seminar I		3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions		3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)		3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)		1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)		3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)		1	<input type="checkbox"/>		
MATH-111	Calculus I (Fall)		4	<input type="checkbox"/>		
MATH-112	Calculus II (Spring)	(MATH-111)	4	<input type="checkbox"/>		

**Physical Education....OR....Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>		
PE-( )	Physical Education (.5 cr)		<input type="checkbox"/>		

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Science Core – 11 credits**

CHEM-104	Chemistry II Lecture (Spring)	(CHEM-103)	3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring)	(CHEM-103L)	1	<input type="checkbox"/>		
BIOL-104	Biology II Lecture (Spring)	(C- or better in BIOL-103)	3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring)	(C- or better in BIOL-103L)	1	<input type="checkbox"/>		

**Environmental & Conservation Biology Core**

☆	ECBIO-101 Environmental Issues (Spring).....		3	<input type="checkbox"/>		
	SCI I (completion of one of the following: SCI-101, BIOL-101, BIOL-103, CHEM-101, PHYS-101)					
☆	.....OR.....ECBIO-201 Biodiversity (Spring)		3	<input type="checkbox"/>		
	SCI II (completion of any 2 of the following: SCI 101, SCI 102, BIO 101, BIO 103, CHEM 101, CHEM 103, PHYS 101 or PHYS 201)					

**LEVEL II (SECOND YEAR) – 33-34 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

( )	Arts & Culture		3	<input type="checkbox"/>		
SOC-2( )	Social Sciences I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
	[WRTG-217 Writing Seminar II for Science recommended]					
( )	Language or Area Studies	(WRTG-101, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		

**Science Core – 21-22 credits**

CHEM-201	Organic Chemistry I (Fall)	(CHEM-104/104L)	3	<input type="checkbox"/>		
CHEM-201L	Organic Chemistry I Lab (Fall)	(CHEM-104/104L)	1	<input type="checkbox"/>		
CHEM-202	Organic Chemistry II (Spring)	(CHEM-201/201L)	3	<input type="checkbox"/>		
CHEM-202L	Organic Chemistry III Lab (Spring)	(CHEM-201/201L)	1	<input type="checkbox"/>		

**Environmental & Conservation Biology Core**

☆	BIOL-205/205L..... Plant Biology w/ Lab (Fall)	(C- or better in BIOL-104/104L)	4	<input type="checkbox"/>		
☆	.....OR.....ECBIO-301 Ecology (Fall)	(C- or better in either BIOL-104/104L or ECBIO-208)				
	ECBIO-207 Soils (Spring)	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>		
☆	ECBIO-201..... Biodiversity (Spring)		3	<input type="checkbox"/>		
	SCI II (completion of any 2 of the following: SCI 101, SCI 102, BIO 101, BIO 103, CHEM 101, CHEM 103, PHYS 101 or PHYS 201)					
☆	.....OR.....ECBIO-101 Environmental Issues (Spring)					
	SCI I (completion of one of the following: SCI-101, BIOL-101, BIOL-103, CHEM-101, PHYS-101)					

**Environmental/Conservation Elective (Select one of the five electives from the designated electives below)**

+ ( )		(Spring)	3-4	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR) – 30-31 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		



PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: HEALTH SCIENCES

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 23-25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
( )	Arts & Culture	3	<input type="checkbox"/>		
CHEM-103	Chemistry I Lecture (Fall)	3	<input type="checkbox"/>		
CHEM-103L	Chemistry I Lab (Fall)	1	<input type="checkbox"/>		
BIOL-103	Biology I Lecture (Fall)	3	<input type="checkbox"/>		
BIOL-103L	Biology I Lab (Fall)	1	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education...OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Health Sciences Core – 9 credits**

HSCI-100	Introduction to Health Professions (Fall)	1	<input type="checkbox"/>		
CHEM-104	Chemistry II Lecture (Spring) <span style="float: right;">(CHEM-103)</span>	3	<input type="checkbox"/>		
CHEM-104L	Chemistry II Lab (Spring) <span style="float: right;">(CHEM-103L)</span>	1	<input type="checkbox"/>		
BIOL-104	Biology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-103)</span>	3	<input type="checkbox"/>		
BIOL-104L	Biology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-103L)</span>	1	<input type="checkbox"/>		

**LEVEL II (SECOND YEAR) – 33 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span> [WRTG-217 Writing Seminar II for Science recommended]	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>		

**Health Sciences Core – 21 credits**

PSYCH-101	Introduction to Psychology (Fall)	3	<input type="checkbox"/>		
PSYCH-213	Developmental Psychology (Spring) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>		
BIOL-201	Anatomy & Physiology Lecture I (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-201L	Anatomy & Physiology I Lab (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>		
BIOL-201	Anatomy & Physiology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>		
BIOL-201L	Anatomy & Physiology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>		

**Designated Science Electives (Group 1) (Fall)**

( )		3	<input type="checkbox"/>		
( )		1	<input type="checkbox"/>		

**Writing Intensive Science Elective (select from list on next page) (Spring)**

( )		3	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR) – 29-30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>		
JSLA-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>		

**Health Sciences Core – 14-15 credits**

PSYCH-201	Abnormal Psychology (Fall)	(PSYCH-101)	3	<input type="checkbox"/>		
STAT-201	Statistics I for Business	(Quantitative Reasoning I)	3	<input type="checkbox"/>		
HSCI-230	Introduction to Health Care (Spring)		2	<input type="checkbox"/>		

**Designated Science Elective (Group 1 or 2)** (select from list below)

( )		(Fall)	3-4	<input type="checkbox"/>		
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**Designated Psychology Elective** (select from list below)

( )		(Spring)	3	<input type="checkbox"/>		
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**Free Elective - 6 credits**

( )		(Spring)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		

**LEVEL IV (FOURTH YEAR) – 25 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives (Spring)		4	<input type="checkbox"/>		
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*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**Health Sciences Core – 15 credits**

HSCI-320	Clinical Interactions (Fall)		3	<input type="checkbox"/>		
HSCI-330	Medical Terminology & Documentation (Spring)		3	<input type="checkbox"/>		

**Designated Psychology Electives** (select from list below)

( )		(Fall)	3	<input type="checkbox"/>		
( )		(Fall)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		

**Free Elective - 6 credits**

( )		(Fall)	3	<input type="checkbox"/>		
( )		(Spring)	3	<input type="checkbox"/>		

**TOTAL CREDITS: 120-123**

<p style="text-align: center;"><b>Designated Science Electives (Group 1)</b></p> <p style="text-align: center;">(Choose one or two)</p> <p>Principles of Genetics w/ Lab (BIOL-207/207L)</p> <p>Organic Chemistry I w/ Lab (CHEM-201/201L)</p> <p>Organic Chemistry II w/ Lab (CHEM-202/202L)</p> <p>Physics I w/ Lab (PHYS-201/201L)</p> <p>Physics II w/ Lab (PHYS-203/203L)</p> <p>Microbiology w/ Lab (BIOL-221/221L)</p> <p>Biochemistry I (BCHEM-312)</p> <p>Biochemistry II (BCHEM-313)</p>	<p style="text-align: center;"><b>Designated Psychology Electives</b></p> <p style="text-align: center;">(Choose four)</p> <p>Social Psychology (PSYCH-232)</p> <p>Interpersonal Relations &amp; Sm Grp Dyn (PSYCH-233)</p> <p>Cognitive Psychology (PSYCH-212)</p> <p>Physiological Psychology (PSYCH-103)</p> <p>Psychopharmacology (PSYCH-241)</p> <p>Sensation &amp; Perception (PSYCH-242)</p> <p>Psychology of Addiction (PSYCH-224)</p> <p>Counseling Psychology (PSYCH-222)</p> <p>Marriage &amp; the Family (PSYCH-223)</p>
<p style="text-align: center;"><b>Designated Science Electives (Group 2)</b></p> <p style="text-align: center;">(Choose one, or choose two from Group 1)</p> <p>Bioorganic Chemistry (CHEM-214)</p> <p>Public Health Issues (ECBIO-303)</p> <p>Histology (BIOL-303)</p> <p>Pathology (BIOL- )</p> <p>Pharmacology (SCI- )</p>	<p style="text-align: center;"><b>Writing Intensive Science Electives</b></p> <p style="text-align: center;">(Choose one)</p> <p>Microbiology w/Lab (BIOL-221/221L)</p> <p>Medicinal Plants (BIOL-209)</p> <p>Immunology (BIOL-315)</p>

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>		
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>		

Please note Philadelphia University residency requirement:

Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

**COURSE STATUS:**  = course to take next semester     = course currently being taken     = course completed

PHILADELPHIA UNIVERSITY  
**JOINT B.S. HEALTH SCIENCES / M.S. PHYSICIAN ASSISTANT STUDIES**  
 5-Year Program

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 23-25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>			
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>			
( )	Arts & Culture	3	<input type="checkbox"/>			
CHEM-103	Science I: Chemistry I Lecture (Fall)	3	<input type="checkbox"/>			
CHEM-103L	Science I: Chemistry I Lab (Fall)	1	<input type="checkbox"/>			
BIOL-103	Science II: Biology I Lecture (Fall)	3	<input type="checkbox"/>			
BIOL-103L	Science II: Biology I Lab (Fall)	1	<input type="checkbox"/>			
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>			
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>			

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Health Sciences Core – 9 credits**

HSCI-100	Introduction to Health Professions (Fall)	1	<input type="checkbox"/>			
CHEM-104	Chemistry II Lecture (Spring) <span style="float: right;">(CHEM-103)</span>	3	<input type="checkbox"/>			
CHEM-104L	Chemistry II Lab (Spring) <span style="float: right;">(CHEM-103L)</span>	1	<input type="checkbox"/>			
BIOL-104	Biology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-103)</span>	3	<input type="checkbox"/>			
BIOL-104L	Biology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-103L)</span>	1	<input type="checkbox"/>			

**LEVEL II (SECOND YEAR) – 35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>			
WRTG-217	Writing Seminar II <span style="float: right;">(WRTG-101/101G, HIST-114)</span>	3	<input type="checkbox"/>			
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>			
( )	Language or Area Studies <span style="float: right;">(WRTG-101/101G, HIST-114 for Area Studies only)</span>	3	<input type="checkbox"/>			

**Health Sciences Core – 23 credits**

PSYCH-101	Introduction to Psychology (Fall)	3	<input type="checkbox"/>			
PSYCH-213	Developmental Psychology (Spring) <span style="float: right;">(PSYCH-101)</span>	3	<input type="checkbox"/>			
CHEM-214	Biorganic Chemistry (Fall) <span style="float: right;">(CHEM-104/104L, C or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>			
BIOL-201	Anatomy & Physiology Lecture I (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>			
BIOL-201L	Anatomy & Physiology I Lab (Fall) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>			
BIOL-201	Anatomy & Physiology II Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>			
BIOL-201L	Anatomy & Physiology II Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>			
BIOL-221	Microbiology Lecture (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	3	<input type="checkbox"/>			
BIOL-221L	Microbiology Lab (Spring) <span style="float: right;">(C- or better in BIOL-104/104L)</span>	1	<input type="checkbox"/>			
HSCI-230	Introduction to Health Care (Spring)	2	<input type="checkbox"/>			

**LEVEL III (THIRD YEAR) – 36 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 13 credits**

HUMN-2( )	Humanities I (Fall) <span style="float: right;">(WRTG-101/101, HIST-114)</span>	3	<input type="checkbox"/>			
JSLA-3( )	Junior Seminar (Fall) <span style="float: right;">(Soc Sci I and Writing II)</span>	3	<input type="checkbox"/>			
JSLA/JSINT-3( )	Junior Seminar (Spring) <span style="float: right;">(Soc Sci I and Writing II)</span>	3	<input type="checkbox"/>			
COLLST-499	Contemporary Perspectives (Spring)	4	<input type="checkbox"/>			

*(Humanities I, one Language/Area Studies, one Junior Seminar)*

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Health Sciences Core – 23 credits**

PSYCH-201	Abnormal Psychology (Fall)	(PSYCH-101)	3	<input type="checkbox"/>		
STAT-201	Statistics I for Business (Fall)	(Quantitative Reasoning I)	3	<input type="checkbox"/>		
BIOL-303	Histology (Fall)	(C- or better in BIOL-104/104L)	4	<input type="checkbox"/>		
HSCI-320	Clinical Interactions (Fall)		3	<input type="checkbox"/>		
BIOL-207	Principles of Genetics Lecture (Spring)	(C- or better in BIOL-104/104L)	3	<input type="checkbox"/>		
BIOL-207L	Principles of Genetics Lab (Spring)	(C- or better in BIOL-104/104L)	1	<input type="checkbox"/>		
BIOL-315	Immunology (Spring)	(BIOL-221/221L)	3	<input type="checkbox"/>		
HSCI-330	Medical Terminology & Documentation (Spring)		3	<input type="checkbox"/>		

**Professional Phase**

[Must be accepted into the Professional Phase in order to enroll in fourth year classes]

**LEVEL IV (FOURTH YEAR) – 20 cr (undergraduate) + 36 cr (graduate)**

(Prerequisite) Cr Sem. Grade TR Equiv.

Fall	PAS-407	Advanced Anatomy (Fall)	(BIOL-202)	5	<input type="checkbox"/>	
	PAS-421	Genetics, Immunology & Micro (Fall)	(BIOL-221)	2	<input type="checkbox"/>	
	PAS-413	Medical Physiology & Pathology (Fall)	(BIOL-202)	3	<input type="checkbox"/>	
	PAS-417	Medical Hist & Physical Diagnosis (Fall)		5	<input type="checkbox"/>	
	PAS-410	Medical & Professional Ethics		2	<input type="checkbox"/>	
Spring	PAS-411	Applied Behavioral Science		3	<input type="checkbox"/>	
	PAS-611	Clinical Medicine (Spring)	(PAS-407, PAS-413, PAS-417)	8	<input type="checkbox"/>	
	PAS-612	Clinical Reasoning (Spring)		2	<input type="checkbox"/>	
	PAS-613	Pharmacology & Pharmacotherapeutics (Spring)		4	<input type="checkbox"/>	
	PAS-614	Emergency Medicine (Spring)		3	<input type="checkbox"/>	
Summer	PAS-615	Laboratory Medicine (Spring)		2	<input type="checkbox"/>	
	PAS-621	Clinical Disciplines (Summer I)		6	<input type="checkbox"/>	
	PAS-622	Pharmacotherapeutics Seminar (Summer I)	(PAS-613)	1	<input type="checkbox"/>	
	PAS-624	Biomedical Literature & Research (Summer I)		3	<input type="checkbox"/>	
	PAS-623	Advanced Radiology/ECG Seminar (Summer)		1	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept (Summer II)		6	<input type="checkbox"/>	

**LEVEL V (FIFTH YEAR) – 57 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

Fall	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
Spring	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
Summer	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS-( )	Rotation/Precept		6	<input type="checkbox"/>	
	PAS0771	PA Master's Culminating Experience (over entire clinical year)		3	<input type="checkbox"/>	

**JOINT B.S. HEALTH SCIENCES / M.S. PHYSICIAN ASSISTANT STUDIES TOTAL CREDITS: 217-219 credits**

**Clinical Level - Rotation and Preceptorships (all 6 credits)**

- |   |   |
|---|---|
| PAS-741 Clinical Rotation: Medicine                 | PAS-759 Preceptorships IA: Primary Care 1     |
| PAS-742 Clinical Rotation: Pediatrics               | PAS-760 Preceptorships IB: Primary Care 2     |
| PAS-743 Clinical Rotation: Women's Health           | PAS-763 Preceptorships IIA: Floating Medicine |
| PAS-744 Clinical Rotation: Psychiatry/Mental Health | PAS-764 Preceptorships IIB: Elective          |
| PAS-745 Clinical Rotation: Surgery                  |   |
| PAS-746 Clinical Rotation: Emergency Medicine       |   |

**Fundamentals Courses:** (Fundamental "099" courses do **not** count toward graduation requirements. However, WRTG-100 **can** be used toward graduation credits....as a free elective.)

MATH-099 Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	
READ-099 Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	

Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits – 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: LAW & SOCIETY

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-33 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 18-20 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>	_____	_____
HIST-114	American Transitions	3	<input type="checkbox"/>	_____	_____
( )	Science I	3	<input type="checkbox"/>	_____	_____
( )	Arts & Culture	3	<input type="checkbox"/>	_____	_____
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>	_____	_____
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>	_____	_____

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101	Finite Mathematics (3cr.)	MATH-102	Pre-calculus (3 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-102	Pre-calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-112	Calculus II (4 cr.)
MATH-103	Introduction to Calculus (3 cr.)	MATH-111	Calculus I (4 cr.)
( )	Free Elective (3 cr.)	( )	Free Elective (3 cr.)

**Physical Education....OR...Community Service (select one, 1 credit option below)**

PE-( )	Physical Education (.5 cr)	SERV-101	Community Service (1 cr.)	<input type="checkbox"/>	_____
PE-( )	Physical Education (.5 cr)			<input type="checkbox"/>	_____

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 9 credits**

LAW-101	Introduction to Law & Society	3	<input type="checkbox"/>	_____	_____
LAW-103	Crime and Justice	3	<input type="checkbox"/>	_____	_____
LAW-105	American Government	3	<input type="checkbox"/>	_____	_____

**Free Elective - 3 credits**

( )	_____	3	<input type="checkbox"/>	_____	_____
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**LEVEL II (SECOND YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

( )	Science II	3	<input type="checkbox"/>	_____	_____
SOC-2( )	Social Sciences I	3	<input type="checkbox"/>	_____	_____
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____

**Major Courses – 15 credits**

LAW-203	Comparative Legal Systems	3	<input type="checkbox"/>	_____	_____
LAW-201	Constitutional Law /Supreme Court	3	<input type="checkbox"/>	_____	_____
LAW-205	Philadelphia Law & Politics	3	<input type="checkbox"/>	_____	_____

**Designated Law Electives (Select from list on next page)**

( )	_____	3	<input type="checkbox"/>	_____	_____
( )	_____	3	<input type="checkbox"/>	_____	_____

**Free Elective - 3 credits**

( )	_____	3	<input type="checkbox"/>	_____	_____
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**LEVEL III (THIRD YEAR) – 30 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( )	Humanities I	3	<input type="checkbox"/>	_____	_____
( )	Language or Area Studies	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	3	<input type="checkbox"/>	_____	_____
JSLA/JSINT-3( )	Junior Seminar	3	<input type="checkbox"/>	_____	_____

**Major Courses – 12 credits**

LAW-300	International Law	3	<input type="checkbox"/>	_____	_____
LAW-306	Legal Research, Wrtg & Moot Court	3	<input type="checkbox"/>	_____	_____





PHILADELPHIA UNIVERSITY  
BACHELOR OF SCIENCE: PSYCHOLOGY

2012-2013

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 31-36 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 21-25 credits**

WRTG-101/101G	Writing Seminar I	3	<input type="checkbox"/>		
HIST-114	Historical Understanding: American Transitions	3	<input type="checkbox"/>		
ARTS-1( )	Arts & Culture	3	<input type="checkbox"/>		
( )	Science I	3-4	<input type="checkbox"/>		
( )	Science II	3-4	<input type="checkbox"/>		
MATH-1( )	Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>		
( )	Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>		

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101 Finite Mathematics (3 cr.)	MATH-102 Pre-calculus (3 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Courses – 6 credits**

PSYCH-101	Introduction to Psychology (Fall)	3	<input type="checkbox"/>		
PSYCH-103	Physiological Psychology (Spring)	(PSYCH-101) 3	<input type="checkbox"/>		

**Free Elective - 3-4 credits**

( )		3-4	<input type="checkbox"/>		
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**LEVEL II (SECOND YEAR) – 30-32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

SOC-2( )	Social Sciences I	3	<input type="checkbox"/>		
WRTG-2( )	Writing Seminar II	3	<input type="checkbox"/>		
	[WRTG-217 Writing Seminar II for Science recommended]				
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	
( )	Language or Area Studies	(WRTG-101/101G, HIST-114 for Area Studies only)	3	<input type="checkbox"/>	

**Major Courses – 12 credits**

PSYCH-201	Abnormal Psychology (Fall)	3	<input type="checkbox"/>		
STAT-221	Psych. Application of Statistics I (Spring)	(PSYCH-101) 3	<input type="checkbox"/>		

**Psychology Distribution Electives (see next page)**

( )		3	<input type="checkbox"/>		
( )		3	<input type="checkbox"/>		

**Minor Option - 3-4 credits (see next page)**

( )		3-4	<input type="checkbox"/>		
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**Free Elective - 3-4 credits**

( )		3-4	<input type="checkbox"/>		
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**LEVEL III (THIRD YEAR)- 30-32 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 9 credits**

HUMN-2( )	Humanities I	3	<input type="checkbox"/>		
JSLA/JSINT-3( )	Junior Seminar	(WRTG-101/101G, HIST-114)	3	<input type="checkbox"/>	
JSLA/JSINT-3( )	Junior Seminar	(Soc Sci I and Writing II)	3	<input type="checkbox"/>	
		(Soc Sci I and Writing II)	3	<input type="checkbox"/>	

**Major Courses - 15 credits**

STAT-321	Psych. Application of Statistics II (Fall)	3	<input type="checkbox"/>		
PSYCH-322	Intro to Experimental Psych (Spring)	(STAT-221) 3	<input type="checkbox"/>		
		(STAT-321) 3	<input type="checkbox"/>		

**LEVEL III (THIRD YEAR) - continued**

(Prerequisite) Cr Sem. Grade TR Equiv.

**Psychology Distribution Electives** (see below)

( )	_____	3	<input type="checkbox"/>	_____	_____
( )	_____	3	<input type="checkbox"/>	_____	_____
( )	_____	3	<input type="checkbox"/>	_____	_____

**Minor Courses - 3-4 credits** (see below)

( )	_____	3-4	<input type="checkbox"/>	_____	_____
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**Free Elective - 3-4 credits**

( )	_____	3-4	<input type="checkbox"/>	_____	_____
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**LEVEL IV (FOURTH YEAR) - 31-35 credits**

(Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 4 credits**

COLLST-499	Contemporary Perspectives	4	<input type="checkbox"/>	_____	_____
<i>(Humanities I, one Language/Area Studies, one Junior Seminar)</i>					

**Major Courses – 15 credits**

PSYCH-391	Adv. Research in Psychology (Fall)	(PSYCH-322 and 21 credits in psychology)	3	<input type="checkbox"/>	_____
PSYCH-410	Senior Colloquium in Psychology (Spring)	(PSYCH-391)	3	<input type="checkbox"/>	_____

**Psychology Distribution Electives** (see below)

( )	_____	3	<input type="checkbox"/>	_____	_____
( )	_____	3	<input type="checkbox"/>	_____	_____
( )	_____	3	<input type="checkbox"/>	_____	_____

**Minor Courses - 6-8 credits** (see below)

( )	_____	3-4	<input type="checkbox"/>	_____	_____
( )	_____	3-4	<input type="checkbox"/>	_____	_____

**Free Elective - 6-8 credits**

( )	_____	3-4	<input type="checkbox"/>	_____	_____
( )	_____	3-4	<input type="checkbox"/>	_____	_____

**TOTAL CREDITS: 122-135 credits**

**Minor Courses:** Students select a minor from those listed in the "Minor" section of this catalog.

**Psychological Distribution Electives** (Select two courses from each of the following four areas)

<p><b>Experimental Psychology Distribution Electives</b></p> <ul style="list-style-type: none"> <li>Forensic Psychology (PSYCH-210)</li> <li>Learning Theory (PSYCH-211)</li> <li>Cognitive Psychology (PSYCH-212)</li> <li>Developmental Psychology (PSYCH-213)</li> <li>History of Psychology (PSYCH-214)</li> </ul>	<p><b>Clinical Psychology Distribution Electives</b></p> <ul style="list-style-type: none"> <li>Clinical Psychology (PSYCH-220)</li> <li>Personality Theory (PSYCH-221)</li> <li>Counseling Psychology (PSYCH-222)</li> <li>Marriage &amp; Family (PSYCH-223)</li> <li>Psychology of Addiction (PSYCH-224)</li> </ul>
<p><b>Social /Organizational Psychology Distribution Electives</b></p> <ul style="list-style-type: none"> <li>Industrial/Organizational Psychology (PSYCH-230)</li> <li>Psychological Assessment (PSYCH-231)</li> <li>Social Psychology (PSYCH-232)</li> <li>Interpersonal Relations &amp; Small Group Dynamics (PSYCH-233)</li> </ul>	<p><b>Biological Basis of Behavior Distribution Electives</b></p> <ul style="list-style-type: none"> <li>Comparative Psychology (PSYCH-240)</li> <li>Psychopharmacology (PSYCH-241)</li> <li>Sensation &amp; Perception (PSYCH-242)</li> <li>Human Sexuality (PSYCH-243)</li> </ul>

**Fundamentals Courses:** (Fundamental "099" courses do not count toward graduation requirements. However, WRTG-100 can be used toward graduation credits....as a free elective.)

MATH-099	Fundamentals of College Mathematics	(must earn C or better)	3	<input type="checkbox"/>	_____
READ-099	Fundamentals of College Reading & Study Skills	(must earn C or better)	3	<input type="checkbox"/>	_____

**Surplus credits not used toward degree requirements**

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Please note Philadelphia University residency requirement:  
Philadelphia University has a residency requirement of 60 credits for Day Division students. Students must take a minimum of 60 credits - 12 credits must be within the major core; 6 credits must be in College Studies in order to be eligible for a B.S. degree.

This form should be used as a worksheet in conjunction with the catalog and the College Studies "menu" of options. Please refer to the Philadelphia University catalog for questions regarding curriculum and academic policies.

**COURSE STATUS:**  = course to take next semester  = course currently being taken  = course completed

PHILADELPHIA UNIVERSITY  
**BACHELOR OF SCIENCE: ENVIRONMENTAL SUSTAINABILITY**

**2012-2013**

Name \_\_\_\_\_

ID# \_\_\_\_\_

**LEVEL I (FIRST YEAR) – 33-35 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 16-18 credits**

WRTG-101/101G Writing Seminar I	3	<input type="checkbox"/>			
HIST-114 Historical Understanding: American Transitions	3	<input type="checkbox"/>			
BIOL-103 Biology I Lecture	3	<input type="checkbox"/>			
BIOL-103L Biology I Lab	1	<input type="checkbox"/>			
MATH-1( ) Quantitative Reasoning I (select one, 2-course option below)	3-4	<input type="checkbox"/>			
( ) Quantitative Reasoning II or Free Elective (select below)	3-4	<input type="checkbox"/>			

*Students must receive credit for either Introduction to Calculus or Calculus I. If a student places into, and passes, Intro to Calculus or Calculus I, the student will have an additional Free Elective.*

MATH-100 or MATH-101 Finite Mathematics (3cr.)	MATH-102 Pre-calculus (3 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-102 Pre-calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-112 Calculus II (4 cr.)
MATH-103 Introduction to Calculus (3 cr.)	MATH-111 Calculus I (4 cr.)
( ) Free Elective (3 cr.)	( ) Free Elective (3 cr.)

**Physical Education....OR...Community Service - 1 credit (select one, 1 credit option below)**

PE-( ) Physical Education (.5 cr)	SERV-101 Community Service (1 cr.)	<input type="checkbox"/>
PE-( ) Physical Education (.5 cr)		<input type="checkbox"/>

Students with 54 or more transfer credits are exempt from this requirement, but must satisfy the credit with free electives

**Major Core - 16 credits**

MKTG-102 Principles of Marketing	3	<input type="checkbox"/>			
BIOL-104L Biology II Lecture <span style="float: right;"><small>(C- or better in BIOL-103)</small></span>	3	<input type="checkbox"/>			
BIOL-104L Biology II Lab <span style="float: right;"><small>(C- or better in BIOL-103L)</small></span>	1	<input type="checkbox"/>			

**Sustainability Core**

SUST-100 Intro to Sustainability	3	<input type="checkbox"/>			
SUST-120 Sustainable Food Chains	3	<input type="checkbox"/>			
SUST-121 Environment & World Cultures	3	<input type="checkbox"/>			

**LEVEL II (SECOND YEAR) – 31 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 16 credits**

CHEM-103 Chemistry I Lecture	3	<input type="checkbox"/>			
CHEM-103L Chemistry I Lab	1	<input type="checkbox"/>			
( ) Arts & Culture	3	<input type="checkbox"/>			
SOC-2( ) Social Sciences I <span style="float: right;"><small>(WRTG-101/101G, HIST-114)</small></span>	3	<input type="checkbox"/>			
WRTG-2( ) Writing Seminar II <span style="float: right;"><small>(WRTG-101/101G, HIST-114)</small></span>	3	<input type="checkbox"/>			
<small>[WRTG-217 Writing Seminar II for Science recommended]</small>					
( ) Language or Area Studies <span style="float: right;"><small>(WRTG-101/101G, HIST-114 for Area Studies only)</small></span>	3	<input type="checkbox"/>			

**Major Core – 15 credits**

ECBIO-101 Environmental Issues <span style="float: right;"><small>(Science I and II)</small></span>	3	<input type="checkbox"/>			
MGMT-301 Principles of Management	3	<input type="checkbox"/>			

**Sustainability Core**

SUST-200 Energy Systems & Politics <span style="float: right;"><small>(HIST-114)</small></span>	3	<input type="checkbox"/>			
SUST-204 Sustain. Planning & Land Use <span style="float: right;"><small>(WRTG-101/101G, HIST-114)</small></span>	3	<input type="checkbox"/>			
SUST-202 Economics of Sustainability <span style="float: right;"><small>(HIST-114)</small></span>	3	<input type="checkbox"/>			

**LEVEL III (THIRD YEAR) – 30 credits** (Prerequisite) Cr Sem. Grade TR Equiv.

**College Studies Courses – 12 credits**

HUMN-2( ) Humanities I <span style="float: right;"><small>(WRTG-101/101G, HIST-114)</small></span>	3	<input type="checkbox"/>			
( ) Language or Area Studies <span style="float: right;"><small>(WRTG-101/101G, HIST-114 for Area Studies only)</small></span>	3	<input type="checkbox"/>			
JSLA/JSINT-3( ) Junior Seminar <span style="float: right;"><small>(Soc Sci I and Writing II)</small></span>	3	<input type="checkbox"/>			
JSLA/JSINT-3( ) Junior Seminar <span style="float: right;"><small>(Soc Sci I and Writing II)</small></span>	3	<input type="checkbox"/>			

