

THOMAS JEFFERSON UNIVERSITY
BACHELOR OF SCIENCE: BIOCHEMISTRY

2023-2024

Name _____

ID# _____

LEVEL I (FIRST YEAR) – 32-33 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

Hallmarks Core Courses – 19-20 credits

FYS-100	Pathways Seminar (Fall) <small>(Not required for transfer students)</small>		1	<input type="checkbox"/>	_____	_____	_____
WRIT-101/G/S	Writing Seminar I <small>WRIT-100 may only be used to satisfy free elective credits</small>		3-4	<input type="checkbox"/>	_____	_____	_____
AVIS-101	American Visions		3	<input type="checkbox"/>	_____	_____	_____
CHEM-113	Chemistry I Lecture (Fall)	<small>(pre or co-req MATH-102 or higher)</small>	3	<input type="checkbox"/>	_____	_____	_____
CHEM-113L	Chemistry I Lab (Fall)	<small>(pre or co-req MATH-102 or higher)</small>	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"/>	_____	_____	_____

Science Core – 13 credits

CHEM-114	Chemistry II Lecture (Spring)	<small>(CHEM-113)</small>	3	<input type="checkbox"/>	_____	_____	_____
CHEM-114L	Chemistry II Lab (Spring)	<small>(CHEM-113L)</small>	1	<input type="checkbox"/>	_____	_____	_____
BIOL-104	Biology II Lecture (Spring)	<small>(C- or better in BIOL-103)</small>	3	<input type="checkbox"/>	_____	_____	_____
BIOL-104L	Biology II Lab (Spring)	<small>(C- or better in BIOL-103L)</small>	1	<input type="checkbox"/>	_____	_____	_____
MATH-112	Calculus II (Spring)	<small>(MATH-111)</small>	4	<input type="checkbox"/>	_____	_____	_____
CHEM-1xx	Scientific Research Methods (Fall)		1	<input type="checkbox"/>	_____	_____	_____

LEVEL II (SECOND YEAR) – 31 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

Hallmarks Core Courses – 9 credits

WRIT-201	Writing Seminar II: Multimedia Comm.	<small>(WRIT-101)</small>	3	<input type="checkbox"/>	_____	_____	_____
ETHC-2()	Ethics	<small>(WRIT-101 and AVIS-101)</small>	3	<input type="checkbox"/>	_____	_____	_____
GDIV-2()	Global Diversity <small>(includes 101-level World Languages)</small>	<small>(WRIT-101 and AVIS-101)</small>	3	<input type="checkbox"/>	_____	_____	_____

Science Core – 19 credits

MATH-331	Mathematical Methods (Fall)	<small>(MATH-112)</small>	3	<input type="checkbox"/>	_____	_____	_____
PHYS-201	Physics I Lecture (Fall)	<small>(MATH-112)</small>	3	<input type="checkbox"/>	_____	_____	_____
PHYS-201L	Physics I Lab (Fall)	<small>(MATH-112)</small>	1	<input type="checkbox"/>	_____	_____	_____
PHYS-203	Physics II Lecture (Spring)	<small>(PHYS-201/201L)</small>	3	<input type="checkbox"/>	_____	_____	_____
PHYS-203L	Physics II Lab (Spring)	<small>(PHYS-201/201L)</small>	1	<input type="checkbox"/>	_____	_____	_____
CHEM-201	Organic Chemistry I (Fall)	<small>(CHEM-114/114L)</small>	3	<input type="checkbox"/>	_____	_____	_____
CHEM-201L	Organic Chemistry I Lab (Fall)	<small>(CHEM-114/114L)</small>	1	<input type="checkbox"/>	_____	_____	_____
CHEM-202	Organic Chemistry II (Spring)	<small>(CHEM-201/201L)</small>	3	<input type="checkbox"/>	_____	_____	_____
CHEM-202L	Organic Chemistry II Lab (Spring)	<small>(CHEM-201/201L)</small>	1	<input type="checkbox"/>	_____	_____	_____

Free Electives - 3 credits

()	_____		3	<input type="checkbox"/>	_____	_____	_____
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LEVEL III (THIRD YEAR) – 31 - 32 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

Hallmarks Core Courses – 12 credits

ADIV-2()	American Diversity	<small>(WRIT-101 and AVIS-101)</small>	3	<input type="checkbox"/>	_____	_____	_____
GCIT-2()	Global Citizenship <small>(includes 201-level World Languages)</small>	<small>(WRIT-101 and AVIS-101)</small>	3	<input type="checkbox"/>	_____	_____	_____
CGIS-300	Contemporary Global Issues	<small>(WRIT-201, and GDIV-2xx or GCIT-2xx)</small>	3	<input type="checkbox"/>	_____	_____	_____
ISEM-3()	Integrative Seminar	<small>(WRIT-201, and GDIV-2xx or GCIT-2xx)</small>	3	<input type="checkbox"/>	_____	_____	_____

Science Core – 19 - 20 credits

BCHM-312	Biochemistry I	<small>(CHEM-202/202L)</small>	3	<input type="checkbox"/>	_____	_____	_____
BCHM-312L	Biochemistry Lab I	<small>(CHEM-202/202L)</small>	1	<input type="checkbox"/>	_____	_____	_____
BCHM-313	Biochemistry II	<small>(BCHEM-312)</small>	3	<input type="checkbox"/>	_____	_____	_____
BCHM-313L	Biochemistry Lab II	<small>(BCHEM-312 and 312L)</small>	1	<input type="checkbox"/>	_____	_____	_____
CHEM-305	Physical Chemistry I (Fall)		4	<input type="checkbox"/>	_____	_____	_____
		<small>(CHEM-202/202L, PHYS-203/203L, and pre or co-requisite MATH-112)</small>					
CHEM-306	Physical Chemistry II (Spring)	<small>(CHEM-305 and pre or co-requisite MATH-331)</small>	4	<input type="checkbox"/>	_____	_____	_____

Advanced Chemistry Electives (select from the designated electives below)

()	_____		3-4	<input type="checkbox"/>	_____	_____	_____
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LEVEL IV (FOURTH YEAR) – 29-31 credits

(Prerequisite) Cr Sem. Grade TR Equiv.

Hallmarks Core Courses – 3 credits

PHIL-499 Philosophies of the Good Life 3
(CGIS-300, ETHC-2XX, ADIV-2XX, MATH-1XXX, GCIT-2XX, GDIV-2XX, ISEM-3XX, Sci Undstg)

Science Core – 17-19 credits

Chemistry Core

CI CHEM-323 Instrumental Methods Analysis (Fall) - Creative Intensive (CHEM-202/202L) 4
 CHEM-309 Inorganic Chemistry (Spring) (CHEM-306) 4

Advanced Chemistry Electives (select from the designated electives below)

☞ () _____ 3-4
☞ () _____ 3-4
☞ () _____ 3

Free Electives - 9 credits

() _____ 3
 () _____ 3
 () _____ 3

TOTAL CREDITS: 123-127

☞ **Advanced Biochemistry Electives** (Select four from these designated electives)

BIOL-204/204L (Cell Bio), BIOL-391/392 (Research), CHEM-391/391 (Research) - CI, SCI-381/381 (Ind Stdy), CHEM-3xx (Pharmacology), CHEM-405 (Adv Organic), MATH-213 (Calculus III) BIOL-207/207L (Principle of Gene), BIOL-256/256L (Molecular Gene), STAT-301 (Biostatistics, may be replaced with the completion of COMP-101, COMP-102, and COMP-103), CHEM-206/206L (Forensic Chem), CHEM-310 (Intro Pharm Industry), CHEM-410 (Polymer Chem), CHEM-417/417L (Env. Chem)

Introductory and Fundamentals Courses: (MATH-099 does **not** count toward graduation requirements. However, WRIT-100 and ITXA-100 **can** be used toward graduation credits in the free elective category.)

MATH-099 Fundamentals of College Mathematics (must earn C or better) 3

Surplus credits not used toward degree requirements

*Please note Thomas Jefferson University residency requirement:
 Thomas Jefferson 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; 9 credits must be in Hallmark courses 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 Hallmark “menu” of options. Please refer to the University catalog for questions regarding curriculum and academic policies.

COURSE STATUS: = course to take next semester = course currently being taken = course completed