

College of Science
Department of Biological Sciences
For Students Graduating in Calendar Year 2021
Bachelor of Science in Biological Sciences
Major: Biological Sciences
Option: Ecology, Evolution, and Behavior Option (EEB)

APPROVED
COMMISSION ON UNDERGRADUATE
STUDIES AND POLICIES

Curriculum for Liberal Education Requirements (38 credits)

I. Writing and Discourse (6 credits)

ENGL 1105 First-Year Writing (3) _____ ENGL 1106 First-Year Writing (3) _____

II. Ideas, Cultural Traditions and Values (6 credits)

_____ (3) _____ (3) _____

III. Society and Human Behavior (6 credits)

_____ (3) _____ (3) _____

IV. Scientific Reasoning and Discovery (8 Credits): Completed within Biological Sciences Major Required Courses

BIOL 1105 Principles of Biology^{1*} (3) _____ BIOL 1106 Principles of Biology^{1*} (3) _____
BIOL 1115 Principles of Biology Lab^{1*} (1) _____ BIOL 1116 Principles of Biology Lab^{1*} (1) _____

V. Quantitative and Symbolic Reasoning (6 credits): Completed within Biological Sciences Major Required Courses

MATH 1025 Elementary Calculus* (3) _____ MATH 1026 Elementary Calculus* (3) _____

VI. Creativity and Aesthetic Experience (3 credits)

_____ (3) _____

VII. Critical Issues in a Global Context (3 Credits)

_____ (3) _____

Degree Core Requirements (21 credits)

BIOL 2004 Genetics# (3) _____ BIOL 2134 Cell Function Differentiation#* (3) _____
BIOL 2704 Evolutionary Biology# (3) _____ BIOL 2804 Ecology# (3) _____
CHEM 1035 General Chemistry^{1*} (3) _____ CHEM 1036 General Chemistry^{1*} (3) _____
STAT 3615 Biological Statistics# (3) _____

Biological Sciences Major Requirements (19 credits)

1. Complete the following courses:

BIOL 1004 Biology Orientation Seminar² (1) _____
CHEM 1045 General Chemistry Lab* (1) _____ CHEM 1046 General Chemistry Lab* (1) _____
CHEM 2535 Organic Chemistry#* (3) _____ CHEM 2536 Organic Chemistry#* (3) _____
CHEM 2545 Organic Chemistry Lab#* (1) _____ CHEM 2546 Organic Chemistry Lab#* (1) _____
PHYS 2205 General Physics#* (3) _____ PHYS 2206 General Physics#* (3) _____
PHYS 2215 General Physics Lab#* (1) _____ PHYS 2216 General Physics Lab#* (1) _____

EEB Option Electives (at least 21 credits)³

1. Complete one of BIOL 2304, BIOL 2504, or BIOL 2604

BIOL 2304 Plant Biology#	(3)	_____	BIOL 2604 General Microbiology#	(3)	_____
BIOL 2504 General Zoology#	(3)	_____			

2. Students must complete at least 9 credits of the following organismal biology, behavior, and physiology courses:

BIOL 1034 Biology of Sex	(3)	_____	BIOL 4474 Ethology#	(3)	_____
BIOL 3014 Insect Biology#	(2)	_____	BIOL 4554 Neurochemical Regulation#	(3)	_____
BIOL 3204 Plant Taxonomy#	(3)	_____	BIOL 4574 Social Behav Birds & Mammals#	(3)	_____
BIOL 3404 Introductory Animal Physiology#	(3)	_____	BIOL 4994 Undergraduate Research (A-F) ⁴	(3)	_____
BIOL 3454 Introductory Parasitology#	(4)	_____	FIW 4334 Mammalogy#	(4)	_____
BIOL 4354 Aquatic Entomology#	(4)	_____	FIW 4344 Herpetology#	(4)	_____
BIOL 4404 Ornithology#	(4)	_____	FIW 4424 Ichthyology# [^]	(4)	_____
BIOL 4454 Invertebrate Zoology#	(4)	_____			

3. Students must complete at least 9 credits of the following ecology and evolution courses:

BIOL 2204 Plants and Civilization#	(3)	_____	BIOL 4334 Chemical Ecology#	(3)	_____
BIOL 3254 Med and Vet Entomology#	(3)	_____	BIOL 4564 Infectious Disease Ecology#	(3)	_____
BIOL 4004 Freshwater Ecology#	(4)	_____	BIOL 4594 EEB Senior Seminar#	(3)	_____
BIOL 4114 Global Change Ecology#	(3)	_____	BIOL 4484 Freshwater Biomonitoring#	(4)	_____
BIOL 4134 Evolutionary Genetics#	(3)	_____	BIOL 4824 Bioinformatics Methods#	(3)	_____
BIOL 4164 Environmental Microbiology#	(3)	_____	BIOL 4994 Undergraduate Research (A-F) ⁴	(3)	_____
BIOL 4314 Plant Ecology#	(4)	_____	CSES 3114 Soils#	(3)	_____
			FIW 4614 Fish Ecology#	(3)	_____
			FIW 4624 Marine Ecology#	(3)	_____

4. Students must complete at least three laboratory courses from the following list (1-12 credits)³:

BIOL 2614 General Microbiology Laboratory#	(2)	_____	BIOL 4354 Aquatic Entomology#	(4)	_____
BIOL 3024 Insect Biology Laboratory#	(2)	_____	BIOL 4454 Invertebrate Zoology#	(4)	_____
BIOL 3114 Field and Laboratory Ecology#	(1)	_____	BIOL 4484 Freshwater Biomonitoring#	(4)	_____
BIOL 3204 Plant Taxonomy#	(3)	_____	BIOL 4824 Bioinformatics Methods#	(3)	_____
BIOL 3264 Med and Vet Ent Lab#	(1)	_____	CSES 3124 Soils Laboratory#	(1)	_____
BIOL 3454 Introductory Parasitology#	(4)	_____	FIW 4334 Mammalogy#	(4)	_____
BIOL 4004 Freshwater Ecology#	(4)	_____	FIW 4344 Herpetology#	(4)	_____
BIOL 4314 Plant Ecology#	(4)	_____	FIW 4424 Ichthyology# [^]	(4)	_____
BIOL 4404 Ornithology#	(4)	_____			

Degree Core Requirements

Biological Science Major Requirements

EEB Option Electives

Total Curriculum for Liberal Education Requirements:

Total Free Electives

Total Credits Required for Graduation

21 Credits

19 Credits

21-30 Credits

38 Credits

9-21 Credits

120 Credits

¹ Students must earn a grade of "C" or better in BIOL 1105, 1106, 1115, 1116, CHEM 1035, CHEM 1036, or the equivalent.

Only two attempts, including course withdrawals with grade of "W", are allowed for each course.

² BIOL 1004 is required but will not be used to calculate in-major GPA.

³ Courses used to complete the laboratory requirement may also count as EEB Option electives (sections 1-2).

⁴ A 3-credit BIOL 4994 experience taken for grade of A-F may count EITHER toward EEB elective group 1 OR 2.

[^]Course has major restriction: students may ask FiW to be added if seats are available.

All BIOL courses (except 1004), any course taken to fulfill EEB Option elective credit, and all required CHEM, MATH, PHYS and STAT courses will be used to calculate in-major GPA.

Some courses listed on this checksheet may have prerequisites, please consult the University Course Catalog, or check with your advisor.

Students must have an in-major and overall GPA of 2.0 to graduate.

*Acceptable Substitutions

BIOL 1105: BIOL 1005 General Biology
 BIOL 1106: BIOL 1006 General Biology
 BIOL 1115: BIOL 1015 General Biology Lab OR BIOL 1125 Biological Principles Lab
 BIOL 1116: BIOL 1016 General Biology Lab OR BIOL 1126 Biological Principles Lab
 BIOL 1105, 1115: BIOL 1205H Honors Biology (4)
 BIOL 1106, 1116: BIOL 1206H Honors Biology (4)
 BIOL 2134: BIOL 2104 Cell & Molecular Biology
 BIOL 2604: BIOL 2604H Honors General Microbiology
 BIOL 2704: BIOL 2704H Honors Evolutionary Biology
 BIOL 2804: BIOL 2804H Honors Ecology
 BIOL 4474: PSYC 2074 Animal Behavior
 CHEM 1035-1036: CHEM 1055 -1056 General Chemistry for Majors
 CHEM 1045-1046: CHEM 1065-1066 General Chemistry Lab for Majors
 CHEM 2535-2536: CHEM 2565-2566 Principles of Organic Chemistry
 CHEM 2545-2546: CHEM 2555-2556 Organic Synthesis and Techniques Lab
 PHYS 2205, 2215: PHYS 2305 Foundations of Physics I
 PHYS 2206, 2216: PHYS 2306 Foundations of Physics I
 MATH 1025: MATH 1016 Elem Calculus w/ Trig OR MATH 1205 Calculus OR MATH 1225 Calculus of a Single Variable OR
 MATH 1525 Elem Calculus w/Matrices
 MATH 1026: MATH 2015 Elem Calculus w/ Trig OR MATH 1206 Calculus OR MATH 1226 Calculus of a Single Variable OR
 MATH 1526 Elem Calculus w/Matrices

Cross-listed Courses on this Checksheet
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ALS/BIOL 4554: Neurochemical Regulation
 BIO/HORT 2304: Plant Biology
 CSES/ENT/BIOL 4164: Environmental Microbiology
 CSES/ENSC/GEOS 3114: Soils
 CSES 3124 / ENSC 3124 / GEOS 3624: Soils Laboratory
 ENT/BIOL 3014: Insect Biology
 ENT/BIOL 3024: Insect Biology Laboratory
 ENT/BIOL 3254: Med and Vet Entomology
 ENT/BIOL 3264: Med and Vet Ent Lab
 ENT/BIOL 4354: Aquatic Entomology
 ENT/FIW/BIOL 4484: Freshwater Biomonitoring

Satisfactory Progress Toward Degree
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1. Students must earn a grade of "C" or better in BIOL 1105, 1106, 1115, 1116, CHEM 1035, CHEM 1036 or equivalent examination, courses taken P/F, and courses completed with a grade of "W"). Only two attempts are allowed for each course.
2. Students must achieve an overall GPA of 2.0 and in-major GPA of 2.2 upon attempting 45 credit hours (including transfer credit, advance placement or IB credit, advance standing credit, credit by examination, courses taken P/F, and courses completed with a grade of "W").
3. All BIOL courses except 1004, any course taken to fulfill Biological Sciences elective credit, and all required CHEM, MATH, PHYS, and STAT courses will be used to calculate in-major GPA.
4. These courses must be completed by the time the student has attempted 72 hours.
 BIOL 1105, 1106, 1115, 1116 or Equivalent
 CHEM 1035, 1036, 1045, 1046 or Equivalent
 MATH 1025, 1026 or Equivalent

College of Science Foreign Language Requirement:

Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six semester hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement do not count toward the hours required for graduation. Please consult the Undergraduate Catalog for details.