## Biology B.A.

## Biology B.A.

## Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see the Eight-Semester Degree Policy (http:// catalog.uark.edu/undergraduatecatalog/academicregulations/ eightsemesterdegreecompletionpolicy/) for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

| First Year | Fall | Units <br> Spring |
| :--- | ---: | ---: |
| ENGL 10103 Composition I (ACTS Equivalency | 3 |  |
| = ENGL 1013) (Satisfies General Education |  |  |
| Outcome 1.1) |  |  |
| Select one of the following (Satisfies General | $3-4$ |  |
| Education Outcome 2.1): |  |  |
| MATH 12003 Plane Trigonometry (ACTS |  |  |
| Equivalency = MATH 1203) |  |  |
| MATH 13004 Precalculus Mathematics (ACTS |  |  |
| Equivalency = MATH 1305) |  |  |
| MATH 24004 Calculus I (ACTS Equivalency = |  |  |
| $\quad$ MATH 2405) |  |  |

ENGL 10203 Composition II (ACTS Equivalency
= ENGL 1023) (Satisfies General Education
Outcome 1.1)
MATH 22003 Survey of Calculus (ACTS
Equivalency $=$ MATH 2203) ${ }^{3}$
or MATH 24004 Calculus I (ACTS Equivalency = MATH 2405)
CHEM 14203 University Chemistry II (ACTS
Equivalency = CHEM 1424 Lecture)
\& CHEM 14201 University Chemistry II Laboratory
(ACTS Equivalency $=$ CHEM 1424 Lab)
Select one of the following (Satisfies General Education Outcome 4.2:

HIST 20003 History of the American People to 1877 (ACTS Equivalency = HIST 2113) HIST 20103 History of the American People, 1877 to Present (ACTS Equivalency $=$ HIST 2123)

PLSC 20003 American National Government (ACTS Equivalency $=$ PLSC 2003)

Fine Arts State Minimum Core (Satisfies General 3
Education Outcome 3.1) ${ }^{2}$
Year Total:
15

| Second Year | Fall | Units <br> Spring |
| :--- | ---: | ---: |
| BIOL 25473 Cell Biology (BIOL 25471 optional) $)^{3}$ | 3 |  |
| Select from the following: | 4 |  |

General Education Outcome 3.3) ${ }^{5}$
State Minimum Core Social Sciences (Satisfies
General Education Outcome 3.3)(as needed) or
General Elective ${ }^{5}$
General Elective (Select a course that satisfies
General Education Outcome 4.1) ${ }^{6}$
Select one of the following:
BIOL 23373 General Genetics
\& BIOL 23371 General Genetics Laboratory ${ }^{3}$
Biology elective
BIOL 30473 Evolutionary Biology ${ }^{3,4}$
Select one of the following:
CHEM 36203 Organic Chemistry II
\& CHEM 36201 Organic Chemistry II Laboratory ${ }^{3,4}$
CHEM 26103 Organic Physiological Chemistry
(ACTS Equivalency = CHEM 1224 Lecture)
\& CHEM 26101 Organic Physiological
Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab) ${ }^{3}$
Select one of the following:
PHIL 21003 Introduction to Ethics (ACTS
Equivalency = PHIL 1003) (Satisfies General
Education Outcomes 3.2 and 5.1)
PHIL 22003 Logic (ACTS Equivalency $=$ PHIL 1003) ${ }^{3}$

PHIL 31103 Environmental Ethics ${ }^{3,4}$
PHIL 42103 Philosophy of Science ${ }^{3,4}$
State Minimum Core Social Sciences (Satisfies General Education Outcome 3.3) ${ }^{5}$
State Minimum Core Humanities (Select a course
that satisfies both General Education Outcome 3.2
and 5.1) (as needed) or General Elective ${ }^{7}$
General Elective or Social Sciences State
Minimum Core (as needed)
Year Total: 16

Third Year $\quad$ Fall | Units |
| ---: |
| Spring |

One of the following: $3-4$
BIOL 30473 Evolutionary Biology ${ }^{3,4}$

BIOL 38773 General Ecology
\& BIOL 38771 General Ecology Laboratory ${ }^{3,4}$
Biology Elective

Biology elective
PHYS 20103 College Physics I (ACTS Equivalency
= PHYS 2014 Lecture)
\& PHYS 20101 College Physics I Laboratory
$\left(\right.$ ACTS Equivalency $=$ PHYS 2014 Lab) ${ }^{3}$
Select one of the following:
STAT 28233 Biostatistics
MATH 21003 Principles of Statistics (ACTS
Equivalency = MATH 2103) ${ }^{3}$
STAT 30043 Statistical Methods
\& STAT 30041 Statistics Methods Laboratory ${ }^{3,4}$
MATH 21803 Mathematical Reasoning in a
Quantitative World ${ }^{3,4}$
Select one of the following as needed:
State Minimum Core Social Sciences (Satisfies
General Education Outcome 3.3) (if needed) ${ }^{5}$
PHIL 21003 Introduction to Ethics (ACTS
Equivalency = PHIL 1003) (Satisfies General
Education Outcomes 3.2 and 5.1)
PHIL 22003 Logic (ACTS Equivalency = PHIL
1003) ${ }^{3}$

PHIL 31103 Environmental Ethics ${ }^{3,4}$
PHIL 42103 Philosophy of Science ${ }^{3,4}$
Select one of the following:
BIOL 38773 General Ecology
\& BIOL 38771 General Ecology Laboratory ${ }^{3,4}$
BIOL 30473 Evolutionary Biology ((if still
needed) or) ${ }^{3,4}$
BIOL 3000-4000 Level Elective ${ }^{3,4}$
BIOL 3000-4000 Level Elective ${ }^{3,4}$
PHYS 20203 College Physics II (ACTS
Equivalency = PHYS 2024 Lecture)
\& PHYS 20201 College Physics II Laboratory
$\left(\right.$ ACTS Equivalency $=$ PHYS 2024 Lab) ${ }^{3}$
General Elective
General Elective (select a course that satisfies
General Education Outcome 1.2) ${ }^{8}$
Year Total:

| Fourth Year |  |
| :--- | ---: |
|  | Fall |
| BIOL 3000-4000 Level Biology Elective |  |
| BIOL $3000-4000$ | Level Biology Elective |
| 3,4 | $3-4$ |
| General Electives | 6 |

BIOL 3000-4000 Level Elective ${ }^{3,4}$
BIOL 3000-4000 Level Elective ${ }^{3,4}$
Upper Level Elective in Fulbright College (if needed for 24-hour rule) or General Elective
General Electives (as needed to total 120 degree hours)
Year Total:

Total Units in Sequence:

## General Education Outcome 6.1: Biology Capstone Experience

Biology Capstone Experience and the Fulbright College writing requirement may be met by one of the following:

1. Completion of an Honors research project and preparation of a thesis (BIOL 499HV): Students will prepare an Honors thesis on original research and an oral presentation of the research to an Honors defense committee followed by defense. Students using this approach will satisfy General Education outcome 1.2 and partially satisfy General Education outcome 6.1 (additional requirement below). or
2. Completion of a senior thesis (BIOL 4987V) supervised by a faculty member in Biological Sciences following the guidelines defined by the Department of Biological Sciences. Students must enroll in BIOL 4987 V with the supervising faculty member in the semester they are preparing the thesis. Students using this approach will partially satisfy General Education outcome 6.1 (additional requirement below).
and
3. In addition to one of the above: All Biology majors, Honors and non-Honors, must complete and submit a 1,250-word document demonstrating at least three of the five skills and abilities listed below that were used in their Capstone Experience. In completing the document, students should reflect on the skills and abilities gained through Learning outcomes 1 through 5 and how these were utilized in completing the integrative project (To complete General Education outcome 6.1).
a. Written, oral, and/or multimodal communication abilities
b. Quantitative literacy
c. Characteristics of inquiry and action in the major and in one of the Learning Outcomes under Goal 3 besides the disciplinary area of the major
d. Diversity awareness and/or intercultural competency
e. Critical thinking and/or ethical reasoning
${ }^{1}$ Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 12003, MATH 13004, or MATH 24004.
2 The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: ARCH 10003, ARHS 10003, COMM 10003, DANC 10003, LARC 10003, MUSC 10003, MUSC 100H3, MUSC 10103, MUSC 101H3, MUSC 13303, THTR 10003, THTR 10103, or THTR 101 H 3.
${ }^{3}$ Meets 40 -hour advanced credit hour requirement. See College Academic Regulations (http://catalog.uark.edu/undergraduatecatalog/ collegesandschools/jwilliamfulbrightcollegeofartsandsciences/).
${ }^{4}$ Meets 24 -hour rule ( 24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40 -hour rule. See College Academic Regulations (http://catalog.uark.edu/undergraduatecatalog/ collegesandschools/jwilliamfulbrightcollegeofartsandsciences/).
${ }^{5}$ The Social Sciences Elective courses which satisfy General Education Outcome 3.3 include:
AGEC 11003, AGEC 21003, ANTH 10203, COMM 10203,
ECON 21003, ECON 22003, ECON 21403, EDST 20003, HDFS 14003,
HDFS 24103, HDFS 26003, HIST 11193, HIST 111H3, HIST 11293,
HIST 112H3, HIST 20003, HIST 20103, HIST 20903, HUMN 111H4,

HUMN 211H4, INST 28103, INST 281H3, PLSC 20003, PLSC 20103, PLSC 21003, PLSC 28103, PLSC 281H3, PSYC 20003, RESM 28503, SOCI 10103, SOCI 101H3, or SOCI 20103.
${ }^{6}$ Courses which satisfy the General Education Outcome 4.1 include: AGEC 23003, AMPD 10103, ANTH 10203, ANTH 10303, ANTH 40103, ARCH 10003, CATE 31003, CLST 10003, CLST 100H3, CLST 10103,COMM 10203, GEOG 21003, GEOG 210H3, GERM 20103, HDFS 14003, HDFS 24103, HDFS 24903, HIST 11193, HIST 111H3, HIST 11293, HIST 112H3, HIST 20903, HORT 11003, HRDE 41303, HUMN 111H4, HUMN 112H4, HUMN 211H4, HUMN 22103, INST 28103, INST 281H3, LALS 20103, LARC 10003, MUSY 20003, MUSY 200H3, NURS 40233, PHIL 31103, PHIL 40903, PHIL 41103, PLSC 20103, PLSC 28103, PLSC 281H3, RESM 28503, SCWK 31903, SOCI 10103, SOCI 101H3, SOCI 20103, ENGL 11103, ENGL 11203, or intermediate-level world language.
7 The Humanities Elective courses which satisfy both General Education Outcomes 3.2 and 5.1 include:
CLST 10003, CLST 100H3, CLST 10103, HUMN 112H4, PHIL 20003, PHIL 200H3, PHIL 21003.
${ }^{8}$ Courses which satisfy the General Education Outcome 1.2 include: ACOM 31403, ACOM 314H3, AGED 31303, AGED 41203, CATE 40103, CATE 40612, SPCH 10003, ENGL 10303, ENGL 103H3, INST 33003, INST 35003, INST 36003, INST 46003, NURS 40932, NURS 41152, or NURS 47031.

