

# 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	Units	
	Fall	Spring
ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)	3	
Select one of the following (Satisfies General Education Outcome 2.1): <sup>1</sup>	3-4	
MATH 1213 Plane Trigonometry (ACTS Equivalency = MATH 1203)		
MATH 1284C Precalculus Mathematics (ACTS Equivalency = MATH 1305)		
MATH 2554 Calculus I (ACTS Equivalency = MATH 2405) <sup>3</sup>		
BIOL 1584 Biology for Majors (ACTS Equivalency = BIOL 1014 Lecture) (Satisfies General Education Outcome 3.4)	4	
Satisfies General Education Outcome 3.4:		
CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture) & CHEM 1101L University Chemistry I Laboratory (ACTS Equivalency = CHEM 1414 Lab)	4	
General Elective	0-1	
ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.1)	3	
MATH 2043 Survey of Calculus (ACTS Equivalency = MATH 2203) <sup>3</sup> or MATH 2554 Calculus I (ACTS Equivalency = MATH 2405)	3	
CHEM 1123 University Chemistry II (ACTS Equivalency = CHEM 1424 Lecture) & CHEM 1121L University Chemistry II Laboratory (ACTS Equivalency = CHEM 1424 Lab)	4	
Select one of the following (Satisfies General Education Outcome 4.2:	3	
HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)		
HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)		
PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003)		

Fine Arts State Minimum Core (Satisfies General Education Outcome 3.1) <sup>2</sup>		3
Year Total:	15	16

Second Year	Units	
	Fall	Spring
BIOL 2533 Cell Biology (BIOL 2531L optional) <sup>3</sup>	3	
Select from the following:	4	
CHEM 3603 Organic Chemistry I & CHEM 3601L Organic Chemistry I Laboratory <sup>3,4</sup>		
or		
BIOL 2323 General Genetics & BIOL 2321L General Genetics Laboratory <sup>3</sup>		
State Minimum Core Social Sciences (Satisfies General Education Outcome 3.3) <sup>5</sup>	3	
State Minimum Core Social Sciences (Satisfies General Education Outcome 3.3)(as needed) or General Elective <sup>5</sup>	3	
General Elective (Select a course that satisfies General Education Outcome 4.1) <sup>6</sup>	3	
Select one of the following:		3-4
BIOL 2323 General Genetics & BIOL 2321L General Genetics Laboratory <sup>3</sup>		
Biology elective		
BIOL 3023 Evolutionary Biology <sup>3,4</sup>		
Select one of the following:		4
CHEM 3613 Organic Chemistry II & CHEM 3611L Organic Chemistry II Laboratory <sup>3,4</sup>		
CHEM 2613 Organic Physiological Chemistry (ACTS Equivalency = CHEM 1224 Lecture) & CHEM 2611L Organic Physiological Chemistry Laboratory (ACTS Equivalency = CHEM 1224 Lab) <sup>3</sup>		
Select one of the following:		3
PHIL 2103 Introduction to Ethics (ACTS Equivalency = PHIL 1003) (Satisfies General Education Outcomes 3.2 and 5.1)		
PHIL 2203 Logic (ACTS Equivalency = PHIL 1003) <sup>3</sup>		
PHIL 3113 Environmental Ethics <sup>3,4</sup>		
PHIL 4213 Philosophy of Science <sup>3,4</sup>		
State Minimum Core Social Sciences (Satisfies General Education Outcome 3.3) <sup>5</sup>		
State Minimum Core Humanities (Select a course that satisfies both General Education Outcome 3.2 and 5.1) (as needed) or General Elective <sup>7</sup>		3
General Elective or Social Sciences State Minimum Core (as needed)		3
Year Total:	16	16

Third Year	Units	
	Fall	Spring
One of the following:	3-4	
BIOL 3023 Evolutionary Biology <sup>3,4</sup>		

BIOL 3863 General Ecology & BIOL 3861L General Ecology Laboratory <sup>3,4</sup> Biology Elective		
Biology elective	3-4	
PHYS 2013 College Physics I (ACTS Equivalency = PHYS 2014 Lecture) & PHYS 2011L College Physics I Laboratory (ACTS Equivalency = PHYS 2014 Lab) <sup>3</sup>	4	
Select one of the following:	3-4	
STAT 2823 Biostatistics		
STAT 2303 Principles of Statistics (ACTS Equivalency = MATH 2103) <sup>3</sup>		
STAT 3003 Statistical Methods & STAT 3001L Statistics Methods Laboratory <sup>3,4</sup>		
MATH 2183 Mathematical Reasoning in a Quantitative World <sup>3,4</sup>		
Select one of the following as needed:	3	
State Minimum Core Social Sciences (Satisfies General Education Outcome 3.3) (if needed) <sup>5</sup>		
PHIL 2103 Introduction to Ethics (ACTS Equivalency = PHIL 1003) (Satisfies General Education Outcomes 3.2 and 5.1)		
PHIL 2203 Logic (ACTS Equivalency = PHIL 1003) <sup>3</sup>		
PHIL 3113 Environmental Ethics <sup>3,4</sup>		
PHIL 4213 Philosophy of Science <sup>3,4</sup>		
Select one of the following:	3-4	
BIOL 3863 General Ecology & BIOL 3861L General Ecology Laboratory <sup>3,4</sup>		
BIOL 3023 Evolutionary Biology ((if still needed) or) <sup>3,4</sup>		
BIOL 3000-4000 Level Elective <sup>3,4</sup>		
BIOL 3000-4000 Level Elective <sup>3,4</sup>	3-4	
PHYS 2033 College Physics II (ACTS Equivalency = PHYS 2024 Lecture) & PHYS 2031L College Physics II Laboratory (ACTS Equivalency = PHYS 2024 Lab) <sup>3</sup>	4	
General Elective	3	
General Elective (select a course that satisfies General Education Outcome 1.2) <sup>8</sup>	3	
Year Total:	18	18

Fourth Year	Units	
	Fall	Spring
BIOL 3000-4000 Level Biology Elective <sup>3,4</sup>	3-4	
BIOL 3000-4000 Level Biology Elective <sup>3,4</sup>	3-4	
General Electives	6	
BIOL 3000-4000 Level Elective <sup>3,4</sup>		3-4
BIOL 3000-4000 Level Elective <sup>3,4</sup>		3-4
Upper Level Elective in Fulbright College (if needed for 24-hour rule) or General Elective		3
General Electives (as needed to total 120 degree hours)		3-4
Year Total:	12	9

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**Total Units in Sequence:** **120**

**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 499VH): 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 498V) supervised by a faculty member in Biological Sciences following the guidelines defined by the Department of Biological Sciences. Students must enroll in BIOL 498V 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

<sup>1</sup> Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 1213, MATH 1284C, or MATH 2554.

<sup>2</sup> The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: ARCH 1003, ARHS 1003, COMM 1003, DANC 1003, LARC 1003, MLIT 1003, MLIT 1003H, MLIT 1013, MLIT 1013H, MLIT 1333, THTR 1003, THTR 1013, or THTR 1013H.

<sup>3</sup> Meets 40-hour advanced credit hour requirement. See College Academic Regulations (<http://catalog.uark.edu/undergraduatecatalog/collegesandschools/jwilliamfulbrightcollegeofartsandsciences/>).

<sup>4</sup> 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/>).

<sup>5</sup> The Social Sciences Elective courses which satisfy General Education Outcome 3.3 include: AGEC 1103, AGEC 2103, ANTH 1023, COMM 1023, ECON 2013, ECON 2023, ECON 2143, EDST 2003, HDFS 1403, HDFS 2413, HDFS 2603, HIST 1113, HIST 1113H, HIST 1123, HIST 1123H, HIST 2003, HIST 2013, HIST 2093, HUMN 1114H, HUMN 2114H, INST 2813, INST 2813H, PLSC 2003, PLSC 2013,

PLSC 2203, PLSC 2813, PLSC 2813H, PSYC 2003, RESM 2853, SOCI 2013, SOCI 2013H, or SOCI 2033.

<sup>6</sup> Courses which satisfy the General Education Outcome 4.1 include: AGECE 2303, AMPD 1013, ANTH 1023, ANTH 1033, ANTH 4013, ARCH 1003, CATE 3103, CLST 1003, CLST 1003H, CLST 1013, COMM 1023, GEOS 2003, GEOS 2003H, GERM 2003, HDFS 1403, HDFS 2413, HDFS 2493, HIST 1113, HIST 1113H, HIST 1123, HIST 1123H, HIST 2093, HORT 1103, HRWD 4133, HUMN 1114H, HUMN 1124H, HUMN 2114H, HUMN 2213, INST 2813, INST 2813H, LALS 2013, LARC 1003, MUSY 2003, MUSY 2003H, NURS 4023, PHIL 3113, PHIL 4093, PHIL 4113, PLSC 2013, PLSC 2813, PLSC 2813H, RESM 2853, SCWK 3193, SOCI 2013, SOCI 2013H, SOCI 2033, WLIT 1113, WLIT 1123, or intermediate-level world language (usually 2003-level).

<sup>7</sup> The Humanities Elective courses which satisfy both General Education Outcomes 3.2 and 5.1 include: CLST 1003, CLST 1003H, CLST 1013, HUMN 1124H, PHIL 2003, PHIL 2003C, PHIL 2003H, PHIL 2103, or PHIL 2103C.

<sup>8</sup> Courses which satisfy the General Education Outcome 1.2 include: ACOM 3143, ACOM 3143H, AGED 3133, AGED 4003, CATE 4013, CATE 406X, COMM 1313, ENGL 1033, ENGL 1033H, INST 3303, INST 3503, INST 3603, INST 4603, NURS 4092, NURS 4112, or NURS 4701.