

MAJOR MAP FOR BACHELOR OF ARTS IN BIOLOGY (BIOLBA) 2016-17 THROUGH 2023-24 CATALOG YEARS

Last Updated: Dec 19, 2023

BIOLBA Degree Snapshot

University Perspectives (0-1 hr)

_____ **UNIV 1001**, University Perspectives (waived for transfer students with 24 or more transferred hours)

State Core English Composition (0-6 hrs)

_____ **ENGL 1013**, Composition 1 or exemption
_____ **ENGL 1023**, Composition 2 or exemption (see [catalog](#) for ACT/SAT test score exemption)

State Core US History or Government (3 hrs)

_____ **US HIST/PLSC** _____

State Core Mathematics (0 hrs)

Met in major

State Core Natural Sciences w/ labs (0 hrs)

Completed through major requirements

State Core Social Sciences (9 hrs)

_____ **Social Science** _____
_____ **Social Science** _____
_____ **Social Science** _____

State Core Fine Arts (3 hrs)

_____ **Fine Art** _____

State Core Humanities (0-3 hrs, possibly met with PHIL from major)

_____ **Humanities** _____

Philosophy Requirement (3 hrs)

Choose 1:

_____ **PHIL 2103**, Intro to Ethics (also counts as core humanities)
_____ **PHIL 2203**, Intro to Logic (also counts as core humanities)
_____ **PHIL 3303**, Environmental Ethics
_____ **PHIL 4213**, Philosophy of Science

Mathematics for Major (6-14 hrs)

_____ **MATH 1203**, College Algebra (C or higher, or math placement score into Pre-Cal. Only required if taking MATH 2554.)
_____ **MATH 1284 or 1213** (C or higher, or math placement score into Cal 1. Only required if taking MATH 2554.)
_____ **MATH 2554**, Calculus 1 or **MATH 2043**, Survey of Calculus (required)
_____ **Statistics course** _____

Chemistry (12-16 hrs hrs, each class is a pre-requisite to the next)

_____ **CHEM 1103/1101L**, University Chemistry 1 (Pre-req-MATH 1203)
_____ **CHEM 1123/1121L**, University Chemistry 2

Choose 1 option:

_____ **CHEM 2613/2611L**, Organic Physiological Chemistry

Or BOTH:

_____ **CHEM 3603/3601L**, Organic Chemistry 1 AND

_____ **CHEM 3613/3611L**, Organic Chemistry 2

Physics (8 hrs)

_____ **PHYS 2013/2011L**, College Physics 1 (Pre-req: [MATH 1203 and 1313] or MATH 1284 or 2554. Or Math placement)
_____ **PHYS 2033/2031L**, College Physics 2 (Pre-req: PHYS 2013 or 2054)

Biology Core (17 hrs)

_____ **BIOL 1584**, Biology for majors (includes lab. Co or pre-req: CHEM 1103)
_____ **BIOL 2533**, Cell Biology (Pre-req: BIOL 1584. CHEM 1123 preferred)
_____ **BIOL 2323**, Genetics (Pre-req: BIOL 1584, CHEM 1103, and MATH 1203 (or STAT 2303) or higher math)
_____ **BIOL 3863**, General Ecology (Pre-req: 7 hrs BIOL classes)
_____ **BIOL 3023**, Evolutionary Biology (Pre-req: BIOL 2323)

Choose 1 lab:

_____ **BIOL 2531L, 2321L OR 3861L**

Biology Electives (13 hrs)

Take 13 hrs of BIOL electives, 9 hours must be 3000+, and at least one course must be 2000+ with a lab

_____ **BIOL 3000+** _____

_____ **BIOL 3000+** _____

_____ **BIOL 3000+** _____

_____ **BIOL 2000+ w. Lab** _____

Upper-Level Course Rule in Major:

Students are required to take **20 hours** of 3000 level credit within their BIOL, CHEM, STAT, and PHIL classes

General Electives (24-45 hrs)

How you use these hours will depend on your educational and career goals. Early in your degree you might use this section to jot down ideas for how to plan. As you get closer to graduation, you might use this section to track which classes you've taken outside the above requirements.

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Graduation Plan

Use the following additional resources, in addition to this major map, to complete your graduation plan ([Catalog](#), and your [Degree Audit](#) in UAconnect). Many students have more than one major, minor, or pre-professional goal that has additional required classes. This tool allows you to combine all your educational goals in to one plan.

High School credit	List all Advanced Placement, International Baccalaureate, Dual or Concurrent credit			
Year	Fall	Spring	Summer	Total
Year 1				Total 1 st year credit hours (aim for 30):
Year 2				Total 2 nd year credit hours (aim for 60):
Year 3				Total 3 rd year credit hours (aim for 90):
Year 4				Total 4 th year credit hours (Must be at least 120):

Graduation Checklist (does your plan include the following):

- Do you have at least a 2.0 GPA (this will be something you track each semester)
- All state minimum core requirements
- All Major(s)/Minor(s) requirements
- [Writing requirement](#) complete
- Have At least 50% of each major/minor taken from UofA
- 24 hours of 3000+ classes exclusively from Fulbright College of Arts and Sciences classes
- 30 hours of 3000+ classes exclusively from the University of Arkansas. This can include courses taken for the 24-hour rule.
- 40 hours of upper-level classes. (3000+ or 2000+ with a pre-requisite. Can include transfer credit.) This can include courses taken for the 24-hour and 30-hour rules.
- 120 total eligible credit hours (see below for a list of ineligible classes)

COURSES THAT DO NOT COUNT TOWARDS THE 120 HOURS REQUIRED FOR GRADUATION

- ENGL 0002
- MATH 0001L, MATH 0002L, MATH 0003, and MATH 0131L
- Duplicated/Repeated courses (i.e.: if the same course is taken more than once, the hours will only count once for graduation)

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Department Information:

Faculty who have exception/substitution authority: Michelle Evans-White or Dan Lessner

Note about Pre-requisites: Due to the nature of math placement, many science classes will offer multiple pre-requisite options. This document lists the class that serves as the pre-requisite, but see the [catalog](#) for additional options. Math classes need to be passed with a C or higher to serve as pre-requisites.

Note about Upper-Level Graduation Requirements: All Arts and Sciences majors are required to take a certain number of upper-level classes (See the College and University Requirements section below for a specific breakdown). Due to the large number of choices available in the BIOLBA, the number of upper-level General Electives that a student needs to take will vary. **Additionally, Students must complete a minimum of 20 credit hours at the 3000-level from any combination of BIOL, CHEM, STAT, or PHIL requirements.**

Transfer Coursework Restriction: At least 50% of a student's Arts and Sciences (ARSC) major or minor must be taken at the University of Arkansas.

GPA (Grade Point Average): Every student must have at least a 2.00 cumulative grade point average to be eligible to graduate from the University of Arkansas.

Please visit <https://catalog.uark.edu/undergraduatecatalog> for an extensive list of core, major, graduation, and pre-requisite requirements. To read more about individual classes, visit the [courses of instruction](#) page for course descriptions.

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Degree Requirement Breakdown by Category

The following information is designed to help you navigate your experience in your degree and answer common questions that may come up for each requirement.

Category	Degree Requirements	Curriculum Notes
<u>UNIVERSITY PERSPECTIVES</u> 0-1 hr	<ul style="list-style-type: none"> • UNIV 1001, University Perspectives 	Or equivalent from another University of Arkansas college. (AFLS 1023H, ARSC 1201, GNEG 1111, HIST 1003(H), HIST 1003(H), PLSC 1003, BUSI/WCOB 1111)) Note: students who transfer to the University of Arkansas with at least 24 credit hours will have this requirement waived.
<u>STATE CORE COMPOSITION</u> 0-6 hrs	<ul style="list-style-type: none"> • ENGL 1013, Composition 1 or SAT/ACT exemption • ENGL 1023, Composition 2 or SAT/ACT exemption 	See Catalog for information about placement and/or exemption.
<u>STATE CORE US HISTORY or GOVERNMENT</u> 3 hrs	Choose 1: * <ul style="list-style-type: none"> • HIST 2003, History of the American People to 1877 • HIST 2013, History of the American People 1877 to Present • PLSC 2003, American National Government 	*Some courses may appear as options in multiple areas of the State Core. You can only count each course 1 time in the State Core and will need unique courses in each of the content areas below.
<u>STATE CORE MATHEMATICS</u> 0 hrs	<ul style="list-style-type: none"> • Met in Major 	
<u>STATE CORE NATURAL SCIENCES CORE</u> 0 hrs	Completed through major requirements.	
<u>STATE CORE SOCIAL SCIENCES</u> 9 hrs	Choose 3: * <ul style="list-style-type: none"> • AGEC 1103, Principles of Agriculture Microeconomics • AGEC 2103, Principles of Agriculture Macroeconomics • ANTH 1023, Intro to Cultural Anthropology • COMM 1023, Communication in a Diverse World • ECON 2013, Principles of Macroeconomics • ECON 2023, Principles of Microeconomics • ECON 2143, Basic Economics: Theory and Practice • EDST 2003, Introduction to Educational Studies • GEOS 1123, Human Geography • GEOS 2003, World Regional Geography • HDFS 1403, Life Span Development • HDFS 2413, Family Relations • HDFS 2603, Rural Families & Communities • HIST 1113, Institutions and Ideas of World Civilizations I • HIST 1123, Institutions and Ideas of World Civilizations II • HIST 2003, History of the American People to 1877 • HIST 2013, History of the American People 1877 to Present • HIST 2093, Animals in World History • HUMN 1114H, Honors Roots of Culture to 500 C.E. (Honors only) • HUMN 2114H, Honors Birth of Modern Culture, 1600-1900 (honors only) • INST/PLSC 2813, Intro to International Relations & Global Studies 	*Some courses may appear as options in multiple areas of the State Core. You can only count each course 1 time in the State Core and will need unique courses in each of the content areas below.

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	<ul style="list-style-type: none"> • PLSC 2003, American National Government • PLSC 2013, Intro to Comparative Politics • PLSC 2203, State and Local Government • PSYC 2003, General Psychology • RESM 2853, Leisure and Society • SOCI 2013, General Sociology • SOCI 2033, Social Problems • STEM 2003, The Art of STEM Communication 	
<p>STATE CORE FINE ARTS</p> <p>3 hrs</p>	<p>Choose 1:</p> <ul style="list-style-type: none"> • ARCH 1003, Architecture Lecture • ARHS 1003, Art Lecture • COMM 1003, Film Lecture • DANC 1003, Movement and Dance • ENGL 2023, Creative Writing 1 • HUMN 2114H, Honors Birth of Modern Culture 1600-1900 (honors only) • LARC 1003, The American Landscape • MLIT 1003, Experiencing Music • MLIT 1013, Music and Society (music majors only) • MLIT 1333, Popular Music • THTR 1003, Theatre Appreciation • THTR 1013, Musical Theatre Appreciation • THTR 1683, Acting I • THTR 1883, Acting 1 for Theatre majors 	<p>Classes taken in this category may not overlap in any other core category</p>
<p>STATE CORE HUMANITIES</p> <p>0-3 hrs**</p>	<p>Choose 1: *</p> <ul style="list-style-type: none"> • AAST 2023, The African American Experience • ANTH 1033, Introduction to Archeology • ARCH 1013, Diversity and Design • CLST 1003, Introduction to Classical Studies: Greece • CLST 1013, Introduction to Classical Studies: Rome • COMM 1233, Media, Community and Citizenship • DANC 1003, Dance Appreciation • ENGL 1213, Introduction to Literature • ENGL 2023, Creative Writing I • GNST 2003, Introduction to Gender Studies • HIST 1113, Institutions and Ideas of World Civilizations I • HIST 1123, Institutions and Ideas of World Civilizations II • HIST 2003, History of the American People to 1877 • HIST 2013, History of the American People 1877 to Present • HUMN 1124H*, Honors Equilibrium of Cultures 500-1600 (Honors only) • HUMN 2213, Introduction to World Religions • LALS 2013, Introduction to Latin American and Latino Studies • MRST 2013, Introduction to Medieval and Renaissance Studies • MUSY 2003, Music in World Cultures • PHIL 2003, Introduction to Philosophy • PHIL 2103, Introduction to Ethics** • PHIL 2203, Logic** • PHIL 2303, Human Nature and the Meaning of Life • PHIL 3103, Ethics and the Professions • THTR 1003, Theatre Appreciation 	<p>*Some courses may appear as options in multiple areas of the State Core. You can only count each course 1 time in the State Core and will need unique courses in each of the content areas below.</p> <p>**If taken for the major's Philosophy requirement, these classes can also count here.</p>

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	<ul style="list-style-type: none"> • THTR 1013, Musical Theatre Appreciation • WLIT 1113, World Literature: Beginnings to 1650 CE • WLIT 1123, World Literature: 1650 CE to Present • Any Intermediate level foreign language numbered at the 2000 level 	
<p>PHILOSOPHY REQUIREMENT</p> <p>3 hrs</p>	<p>Choose 1:</p> <ul style="list-style-type: none"> • PHIL 2103, Intro to Ethics (can also count above for humanities) • PHIL 2203, Intro to Logic (can also count above for humanities) • PHIL 3303, Environmental Ethics (does not count for humanities core) • PHIL 4213, Philosophy of Science (does not count for humanities core) 	<p>PHIL 2103 and 2203 overlap with the state minimum humanities core requirement. If a student takes PHIL 3303 or 4213, they will also need a class from the humanities core list.</p>
<p>MATHEMATICS FOR MAJOR</p> <p>6-14 hrs</p>	<ul style="list-style-type: none"> • Possible Pre-requisite: MATH 1203 (C or higher, or math placement score into Pre-cal. Only needed if taking MATH 2554.)* • Possible Pre-requisite: MATH 1284 or 1213 (C or higher, or math placement score into Cal 1. Only needed if taking MATH 2554.)* • MATH 2554, Calculus 1 or MATH 2043, Survey of Calculus (required)** <p>Choose 1:</p> <ul style="list-style-type: none"> • STAT 2303, Principles of Statistics • STAT 2823, Biostatistics • STAT 3003, Statistical Methods • MATH 2183, Mathematical Reasoning 	<p>* Based on ACT/SAT or other math placement scores, students may need to enroll in additional remediation related courses. See catalog or math placement website for additional information.</p> <p>**MATH 2445, Calculus I with Review, may also count here.</p>
<p>CHEMISTRY</p> <p>12-16 hrs</p>	<ul style="list-style-type: none"> • CHEM 1103/1101L, University Chemistry 1 (Pre-req- MATH 1203) • CHEM 1123/1121L, University Chemistry 2 <p>Choose 1 option:</p> <ul style="list-style-type: none"> • CHEM 2613/2611L, Organic Physiological Chemistry • Or BOTH: <ul style="list-style-type: none"> ○ CHEM 3603/3601L, Organic Chemistry 1 AND ○ CHEM 3613/3611L, Organic Chemistry 2 	<p>NOTE: each chemistry class is the pre-requisite to the next class. Students may not proceed to the next class before passing the previous class.</p>
<p>PHYSICS</p> <p>8 hrs</p>	<ul style="list-style-type: none"> • PHYS 2013/2011L, College Physics 1 (Pre-req: [MATH 1203 and 1313] or MATH 1284 or 2554. Or Math placement) • PHYS 2033/2031L, College Physics 2 (Pre-req: PHYS 2013 or 2054) 	<p>Students may also take the following classes, but will have to take Calculus 1 and Calculus 2 to do this option:</p> <ul style="list-style-type: none"> • PHYS 2054, University Physics 1 (includes lab. Pre-req: MATH 2554c) • PHYS 2074, University Physics 2 (includes lab. Pre-req: MATH 2564 and PHYS 2074)
<p>BIOLOGY CORE</p> <p>17 hrs</p>	<ul style="list-style-type: none"> • BIOL 1584, Biology for majors (includes lab. Co or pre-req: CHEM 1103) • BIOL 2533, Cell Biology (Pre-req: BIOL 1584. CHEM 1123 preferred) • BIOL 2323, Genetics (Pre-req: BIOL 1584, CHEM 1103, and MATH 1203 (or STAT 2303) or higher math) • BIOL 3863, General Ecology (Pre-req: 7 hrs BIOL classes) • BIOL 3023, Evolutionary Biology (Pre-req: BIOL 2323) 	<p>Note: A student who completes BIOL 1543/BIOL 1541L Principles of Biology/Lab, with a grade of B or better in both courses may request a substitution from the department for BIOL 1584. BIOL 1584 is the preferred course, and substitutions are not guaranteed.</p>

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	<p><u>Choose 1 lab:</u></p> <ul style="list-style-type: none"> • BIOL 2531L, 2321L OR 3861L 	
<p><u>BIOLOGY ELECTIVES</u></p> <p>13 hrs</p>	<p>Take 13 hours of BIOL electives, which must include <u>9 hrs of 3000+ level</u> courses and at least one course that's <u>2000+ with a lab</u>.</p> <p>NOTE: Upper level BIOL courses vary in hours, so there is not a set number of classes required to get to 13 hrs but would most commonly be 4 classes. Because there is so much variation in options, a student's Degree Audit for this section in UAconnect may not always be accurate until the student asks their academic advisor to manually correct it.</p> <p><u>Courses that include Labs:</u> Any 2000+ class that lists a lab component as part of its course description can count for the lab requirement. BIOL 480V, 480VH, 499V, and 499VH also count as labs.</p> <p>Common lab classes:</p> <ul style="list-style-type: none"> • BIOL 2011L, General Microbiology • BIOL 2211L, Human Physiology • BIOL 2441L, Human Anatomy • BIOL 2321L Genetics lab (If not taken for BIOL core) • BIOL 2531L Cell lab (If not taken for BIOL core) • BIOL 3001L Plant Pathology • BIOL 3011L Introduction to Insect Identification • BIOL 3404 Comparative Vert Morphology • BIOL 3681L Ecology lab (If not taken for BIOL core) • BIOL 4003L Lab in Prokaryote Biology • BIOL 4013 Insect Behavior in Prokaryote Biology • BIOL 4024 Insect Diversity and Taxonomy • BIOL 4053 Insect Ecology • BIOL4104 Taxonomy of Flowering Plants • BIOL4114 Dendrology • BIOL4143 Advanced Methods in Microscopy (no longer taught, but counts as a lab if taken) • BIOL 4174 Conservation Genetics • BIOL 4234 Comparative Physiology • BIOL 4241L Ichthyology Laboratory • BIOL 4404 Comparative Botany (no longer taught, but counts as a lab if taken) • BIOL 4424 Mycology (no longer taught, but counts as a lab if taken) • BIOL 4511L Population Ecology lab • BIOL 4554 Developmental Biology • BIOL 4573L Introduction to Research in Animal Development and Evolution • BIOL 4634 Wetlands Ecology and management (no longer taught, but counts as a lab if taken) • BIOL 4711L Basic Immunology lab • BIOL 4723L Laboratory in Microbial Fermentation • BIOL 4724 Protistology (no longer taught, but counts as a lab if taken) • BIOL 4734 Wildlife Management Techniques • BIOL 4744 Fish Biology • BIOL 4763 Ornithology • BIOL 4774 Biometry 	<p>BIOL 1584 and CHEM 1103/1101L & CHEM 1123/1121L are the pre-reqs to many advanced BIOL courses but some courses may have additional pre-requisites.</p> <p>*Students most often take their 2000+ lab class as a 4-hour lecture/lab combination. This is not required, but students who take a lab class that is less than 4 hours or not paired with a lecture class may need to request their advisor adjust their audit to count all appropriate classes.</p> <p>Classes that transfer as BIOL 399T or 499T may count in this category. as long as students still meet the 50% rule. Not all 99T classes pull into the degree audit automatically, so students may need to request classes be moved into the minor by their academic advisor. A BIOL 299T class could count in this category, if students can demonstrate that the class contained a lab.</p> <p><u>Common Substitutions and Exceptions</u> (All still require a Substitution form):</p> <ul style="list-style-type: none"> • Students may ask for up to 1 of the following non-BIOL courses to count for BIOL electives: <ul style="list-style-type: none"> ○ ANTH 3433 Human Evolution ○ ANTH 3533 Medical Anthropology ○ ANTH 4523 Dental Science ○ CHEM 3813, Elements of Biochemistry ○ CHEM 4843H, Honors Biochemistry II (if CHEM 4813H is also completed) ○ PSYC 3093 Developmental Psychology ○ PSYC 3173 Biopsychology ○ PSYC 4183 Behavioral Neuroscience ○ PBHL 4553 Environmental Health (not taught anymore but counts if previously taken) ○ PBHL 4613 Principles of Epidemiology ○ PBHL 4623 Human Diseases ○ POSC/ANSC 4923 Brain and Behavior

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	<ul style="list-style-type: none"> • BIOL 4783 Mammalogy (no longer taught, but counts as a lab if taken) • BIOL 4814 Limnology Mammalogy (no longer taught, but counts as a lab if taken) • BIOL 4833 Animal Behavior • BIOL 4844 Community and Ecosystem Ecology • BIOL 4863 Analysis of Animal Populations • BIOL 480V: Special Topics "Microbial Fermentation" topic • BIOL 480V: Special Topics "Ichthyology" topic • BIOL 499V(H) Research in Biological Sciences 	
<p><u>GENERAL ELECTIVES</u></p> <p>24-45 hrs</p>	<p>Hours will vary depending on math placement, philosophy choice, chemistry choice, and whether a student is exempt from ENGL 1013 and 1023.</p>	<p>Some general electives will need to be upper level to meet college and university residency requirements. See Graduation Checklist on page 2 for more information.</p>
<p><u>WRITING REQUIREMENT</u></p>	<p>The college writing requirement may be satisfied in one of several ways:</p> <ul style="list-style-type: none"> • Completion of a term paper with a grade of B or better in a BIOL 3000+ course documented with the Writing Requirement Declaration form • Completion of BIOL 498V • Successful honors thesis defense <p><i>NOTE: students completing a paper in a BIOL 3000+ course or in BIOL 480V may not also use the paper for credit in BIOL 498V</i></p>	<p><u>BIOL Courses with Potential Writing Requirement Options[^]</u> [^]You will still need to check on the course's syllabus, and with the professor regarding the completion of the writing requirement. [^]The list does not guarantee a writing requirement will be offered. This is simply a list of courses that have historically offered writing requirement options. Your advisor has compiled this list based on discussions with other students who have completed writing requirements within these courses in previous semesters. [^]This is not an exhaustive list. [^] BIOL 480V: Special Topics courses are likely 3 credit hours each, and typically offered irregularly.</p> <ul style="list-style-type: none"> • BIOL 4554, Developmental Biology • BIOL 4153/4252, Global Change Seminar • BIOL 4233, Genomics & Bioinformatics • BIOL 4433, Principles of Evolution • BIOL 4333, Biotechnology in Agri • BIOL 4793, Intro to Neurobiology • BIOL 4323, Comp Neurobiology • BIOL 4833, Animal Behavior • BIOL 480V, Microbial Ferm lab • BIOL 480V, Microbial Genomics • BIOL 480V, Research Ecology • BIOL 480V, Evolutionary Ecology
<p><u>HONORS</u></p>	<p><u>Minimum Requirements for Honors:</u></p> <ul style="list-style-type: none"> • Maintain cumulative grade point average of 3.5 in all coursework. • Complete a minimum of 12 hours of honors courses from the UofA (including up to 6 hours of BIOL 499VH). • Complete and defend Honors Thesis <p>See Catalog for full description of requirements.</p>	<p><u>Honors Thesis Timeline:</u> Honors students should consistently check the honors thesis timeline to stay on track to complete your honors thesis.</p> <p><u>College Honors:</u> Students who also are following the College Honors Core for Bachelor of Arts programs need to also complete those additional requirements:</p> <ul style="list-style-type: none"> • 2023-24 catalog requirements • 2022-23 and older catalog requirements