

**2024-2024 Degree Map-Bachelor of Science in Biology: Biomedical Option**

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/catalog/>

**Possible careers include: Clinical Research Coordinator, Water Resource Specialist, Molecular and Cellular Biologist, Life Scientist, Biological Science Teacher, Surgeon (MD), Anesthesiologist (MD), Cardiologist (MD), General Internist (MD), Pathologist (MD), Geneticist, Dentistry, Physical Therapy (all medical fields pending medical school)**

#Prerequisite Courses: ENGL 0303 \_\_\_\_\_ MATH 0803 \_\_\_\_\_ MATH 1003 \_\_\_\_\_ MATH 0903 \_\_\_\_\_ MATH 1110 \_\_\_\_\_ COMS 1003 \_\_\_\_\_

Sample Schedule	Milestones/Notes		
Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
MATH 1113- College Algebra or MATH 1914- Pre-Calc.	3-4	#	(ACTS= MATH 1103 or 1305)
CHEM 2124/2120: General Chemistry I (ACTS= CHEM 1414)	4		
BIOL 1011- Orientation to the Biological Sciences	1		
BIOL 1114- Principles of Biology (ACTS= BIOL 1014)	4		
Total hours	15-16	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
CHEM 2134/2130- General Chemistry II (ACTS= CHEM 1424)	4		
BIOL 2124- Principles of Zoology	4		
MATH 2914-Calculus I or other MATH higher than MATH 1113	3-4		MATH 2914- (ACTS =MATH2405)
Total hours	14-15	GPA	

Semester 3	Hrs.	Grade	Semester 3
SOC 1003- Sociology or PSY 2003- Psychology	3		(ACTS= SOCI1013 or PSYC1103)
CHEM 3254- Fundamentals of Org. Chemistry MILESTONE	4		
BIOL 2134- Principles of Botany	4		
BIOL 3033- Bioinformatics or COMS 2003*- Microcomp. Apps.	3		*(prereq.= COMS 1003 or BUAD 2003)
Major Support Elective (choose from list below)	3		
AHS 2013, PE 2513, SOC 4013, 4053, 4183, BIOL 4064, CHEM 3344, 3363			
PSY 3003, 3013, 3053, 3063, 3163, 3813, or 4133			
Total hours	17	GPA	

Semester 4	Hrs.	Grade	Semester 4
COMM 2003- Public Speaking or COMM 2173-Bus/Prof Speaking	3		
Social Science	3		
CHEM 3264- Mechanistic Organic Chemistry	4		
BIOL 2014- Human Anatomy (ACTS=BIOL 2404)	4		
Statistics- PSY/SOC 2053 or STAT 2163	3		
Total hours	17	GPA	<b>BIOL ADVISOR ASSIGNED</b>

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed by searching keyword "ACTS" at <https://adhe.edu/>

Fine Arts and Humanities	U.S. History & Government
ART 2123 Experiencing Art (ACTS=ARTA1003)	HIST 1903 Survey of American History
MUS 2003 Introduction to Music (ACTS=MUSC1003)	HIST 2003 U.S. History to 1877 (ACTS=HIST2113)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)	HIST 2013 U.S. History since 1877 (ACTS=HIST2123)
ENGL/JOUR 2173 Introduction to Film	POLS 2003 American Government (ACTS=PLSC2003)
ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)	
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)	
PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)	
1013 from SPAN, FR, GER, JPN, CHIN, or LAT	
1023 from SPAN, FR, GER, JPN, CHIN, or LAT	

Sample Schedule	Milestones/Notes		
Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
PHYS 2014/2000- Algebra-Based Physics I (ACTS=PHYS 2014)	4		
BIOL 3074- Human Physiology	4		
BIOL 3054- Microbiology	4		
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
Fine Arts & Humanities	3		
U.S. History & Government	3		
PHYS 2024/2010- Algebra-Based Physics II (ACTS=PHYS 2024)	4		
BIOL 3034- Genetics	4		
BioMed Elective (choose from list below)	3-4		
*BIOL 3064, 3803, 4023, 4033, 4054, 4074, 4083, or 4951-4			
Total hours	17-18	GPA	<b>APPLY FOR GRADUATION</b>

Semester 7	Hrs.	Grade	Semester 7
BIOL 3114- Ecology or BIOL 4094- Coastal Ecology	4		
General Electives (as needed to reach 120 hours)	3		
BioMed Elective (choose from list below)	6-8		
*BIOL 3064, 3803, 4023, 4033, 4054, 4074, 4083, or 4951-4			
Total hours	13-15	GPA	

\*Must choose sufficient electives at 3000-4000 level to constitute a total of 40 hours.

Semester 8	Hrs.	Grade	Semester 8
BIOL 4891- Seminar in Biology	1		<b>Graduation Requirements:</b> Min. hours 3000-4000 level courses: 40 No more than 4 PE activity hours Min. hours required:120 2.00+ GPA No more than 12 hours of "D" grades
General Electives (as needed to reach 120 hours)	8		
BioMed Elective (choose from list below)	3-4		
*BIOL 3064, 3803, 4023, 4033, 4054, 4074, 4083, or 4951-4			
Total Hours	12-15	GPA	

General Electives: 5 - 12 hours (1000-4000 level) as need to complete 40 hrs. total of 3000-4000 level courses.

# indicates a "C" or better is required

U.S. History & Government	Social Sciences
HIST 1503 World History to 1500 (ACTS=HIST1113)	ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)
HIST 1513 World History since 1500 (ACTS=HIST1123)	ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)
HIST 2003 U.S. History to 1877 (ACTS=HIST2113)	GEOG 2013 Regional Geography of the World (ACTS=GEOG2103)
HIST 2013 U.S. History since 1877 (ACTS=HIST2123)	AMST 2003 American Studies
HIST 1903 Survey of American History	FIN 2013 Personal Finance
POLS 2003 American Government (ACTS=PLSC2003)	LEAD 1003 Introduction to Leadership
ECON 2003 Principles of Macroeconomics (ACTS=ECON2103)	
ECON 2013 Principles of Microeconomics (ACTS=ECON2203)	
SOC 1003 Introductory Sociology (ACTS=SOCI1013)	
PSY 2003 General Psychology (ACTS=PSYC1103)	