

**2026-2027 Degree Map-Bachelor of Science in Chemistry, Biochemistry 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 <https://catalog.atu.edu/>

#Prerequisite Courses: ENGL 0303 \_\_\_ MATH 0803 \_\_\_ MATH 1003 \_\_\_ MATH 0903 \_\_\_ MATH 1113 \_\_\_ MATH 1110 \_\_\_  
 MATH 1203 \_\_\_ MATH 1914 \_\_\_ COMS 1003 \_\_\_

Possible Careers: Pharmaceutical Companies, Environment, Food Science, Cosmetics, Forensics, Laboratories.  
 Preparation for Graduate Studies in Chemistry and Medicine.

**Sample Schedule**
**Milestones/Notes**

Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
Social Science	3		
MATH 2914- Calculus I (ACTS= MATH 2405)	4	#	# C or > required for Gen Ed
PHSC 1001- Orientation to Physical Science	1		
CHEM 2124/2120- General Chemistry I and lab	4	#	
Total hours	15	GPA	

Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
BIOL 1114- Principles of Biology (ACTS= BIOL 1014)	4		Freshman Milestone: Visit the Tutoring Center at least once
MATH 2924- Calculus II (ACTS= MATH 2505)	4		
PHSC 1011- Orientation to Physical Science II	1		No Substitutions
CHEM 2134/2130- General Chemistry II and lab	4	#	
Total hours	16	GPA	

Semester 3	Hrs.	Grade	Semester 3
Social Science	3		
PHYS 2014/2114/2000- Algebra or Cal-Based Physics I and lab	4		
COMS 1013/1011- Programming Foundations I and Lab	4		
CHEM 3254/3250- Fundamentals of Org. Chemistry and lab	4	#	
Total hours	15	GPA	

Semester 4	Hrs.	Grade	Semester 4
U.S. History & Government	3		
PHYS 2024/2114/2010- Algebra or Cal-Based Physics II and lab	4		
CHEM 3245- Quantitative Analysis	5	#	
CHEM 3264/3260- Mechanistic Organic Chemistry and lab	4	#	
			Sophomore Milestone: Begin researching graduate programs
Total hours	16	GPA	<b>CHEM 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) MUS 2003 Survey of Music History (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL/JOUR 2173 Introduction to Film 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 LEAD 2003 Ethics in Leadership	HIST 1903 Survey of American History HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003)
<b>University Honors students should consult Course Catalog for appropriate Fine Arts/Humanities, US History/Government and Social Science options for University Honors Curriculum.</b>	

**Sample Schedule**
**Milestones/Notes**

Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
BIOL 2124- Principles of Zoology (ACTS= BIOL 1054)	4		
CHEM 3301- Chemistry Seminar	1	#	
CHEM 3344/3340- Principles of Biochemistry and lab	4	#	
CHEM Elective	3		Choose one: CHEM 3353 Toxicology or CHEM 4033 Medicinal Chemistry
Total hours	15	GPA	

Semester 6	Hrs.	Grade	Semester 6
BIOL 2014- Human Anatomy (ACTS=BIOL 2404)	4		
BIOL 3034- Genetics	4		
CHEM 3363- Metabolic Biochemistry	3	#	
CHEM 3423- Descriptive Inorganic Chemistry	3	#	Junior Milestone: Complete entrance exams, i.e. MCAT, PCAT, etc.
Total hours	14	GPA	<b>APPLY FOR GRADUATION</b>

Semester 7	Hrs.	Grade	Semester 7
CHEM Elective	4		Choose one: CHEM 3353 Toxicology or CHEM 4033 Medicinal Chemistry
CHEM 4414- Instrumental Analysis	4	#	
CHEM 3324- Physical Chemistry I	4	#	Pre-req: PHYS 2114
Fine Arts & Humanities	3		
CHEM 4991- Splc Probs Chem OR CHEM 4951- UG Rsrch in Chem	1	#	Senior Milestone: Complete a senior check-in with Career Services
Total hours	15	GPA	

Semester 8	Hrs.	Grade	Semester 8
BIOL 3074- Human Physiology OR BIOL 3174- Physic	4		
Social Sci/Fine Arts/Humanities/Comm	3		<b>Graduation Requirements:</b>
BIOL 4033- Cell Biology	3		Min. hours 3000-4000 level courses: 40
CHEM 4401- Chemistry Seminar	1	#	No more than 4 PE activity hours
CHEM 4991- Splc Probs Chem OR CHEM 4951- UG Rsrch in Chem	1	#	Min. hours required:120
General Elective	2		No more than 12 hours of D's.
Total Hours	14	GPA	

General Electives: 6 hours 1000-4000 level (Statistics and ENGL 2053 recommended)

# indicates a "C" or better is required

	Social Sciences
HIST 1503 World History to 1500 (ACTS=HIST1113) HIST 1513 World History since 1500 (ACTS=HIST1123) HIST 2003 U.S. History to 1877 (ACTS=HIST2113) HIST 2013 U.S. History since 1877 (ACTS=HIST2123) HIST 1903 Survey of American History POLS 2003 American Government (ACTS=PLSC2003) ECON 2003 Principles of Macroeconomics (ACTS=ECON2103) ECON 2013 Principles of Microeconomics (ACTS=ECON2203) SOC 1003 Introductory Sociology (ACTS=SOC1103) PSY 2003 General Psychology (ACTS=PSYC1103)	ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013) ANTH 2003 Cultural Anthropology (ACTS=ANTH2013) GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) AMST 2003 American Studies FIN 2013 Personal Finance LEAD 1003 Introduction to Leadership <b>Communication Courses</b> COMM 1003 Intro to Speech Comm COMM 2003 Public Speaking COMM 2173 Business and Professional Speaking