

**2023-2024 Degree Map-Bachelor of Science in Chemistry: Environmental 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: Biophysicist, Chemical Engineer, Chemical Technician, Conservation Scientist, Environmental Engineer, Food & Drug Inspector, Food Technologist, Forensic Science Technician, Industrial Air Pollution Analyst, Industrial Waste Inspector, Materials Scientist, Microbiologist, Pharmacist, Soil Scientist, Toxicologist, Water Pollution Control Inspector**

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

Sample Schedule	Milestones/Notes		
Semester 1	Hrs.	Grade	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#	
MATH 2243- Calc. for Bus. & Econ. (ACTS=MATH 2203)	3	#	MATH 2914 may substitute
PHSC 1001- Orientation to Physical Science	1		
ENVS 1004- Principles of Environmental Science	4		Milestone
CHEM 2124/2120- General Chemistry I (ACTS= CHEM 1414)	4	#	Milestone
Total hours	15	GPA	

Sample Schedule	Milestones/Notes		
Semester 2	Hrs.	Grade	Semester 2
ENGL 1023- Comp II (ACTS= ENGL 1023)	3	#	
Social Science	3		
CHEM 3313- Environmental Chemistry	3		
PHSC 1011- Orientation to Physical Science II (MANDATORY)	1		
CHEM 2134/2130- Gen. Chemistry II (ACTS= CHEM 1424)	4	#	
ECON 2003- Principles of Economics I (ACTS= 2103)	3		
Total hours	17	GPA	

Sample Schedule	Milestones/Notes		
Semester 3	Hrs.	Grade	Semester 3
U.S. History & Government	3		
STAT 2163-Intro to Stat. Methods <b>OR</b> PSY/SOC 2053--Stat for Behavioral Sciences	3		
COMS 2003*- Microcomputer Applications <b>OR</b> COMS 2803-Programming in C	3		*(COMS 2003 prereq.= COMS 1003)
PHYS 2014/2000- Algebra-Based Physics I	4		or PHYS 2114/2000- Calculus-Based Phys I
CHEM 3254- Fund. of Organic Chemistry	4	#	Milestone
Total hours	17	GPA	

Sample Schedule	Milestones/Notes		
Semester 4	Hrs.	Grade	Semester 4
PHYS 2024/2010- Algebra-Based Physics II	4		or PHYS 2114/2000- Calculus-Based Phys II
CHEM 2111- Environmental Seminar	1	#	
CHEM 3245- Quantitative Analysis	5	#	
CHEM 3264- Mechanistic Organic Chemistry	4	#	
Total hours	14	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)	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)	<b>Communication Courses</b>
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	COMM 1003 Intro to Speech Comm
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)	COMM 2003 Public Speaking
PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)	COMM 2173 Business and Professional Speaking
1013 from SPAN, FR, GER, JPN, CHIN, or LAT	<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>
1023 from SPAN, FR, GER, JPN, CHIN, or LAT	
LEAD 2003 Ethics in Leadership	

Sample Schedule	Milestones/Notes		
Semester 5	Hrs.	Grade	Semester 5
Fine Arts & Humanities	3		
ENGL 2053- Technical Writing (ACTS=ENGL 2023)	3		
BIOL 2124- Principles of Zoology (ACTS= BIOL 1054)	4		
GEOL 1014- Physical Geology (ACTS= GEOL 1114)	4		
CHEM 3353- Fundamentals of Toxicology	3	#	
Total hours	17	GPA	

Sample Schedule	Milestones/Notes		
Semester 6	Hrs.	Grade	Semester 6
Fine Arts & Humanities	3		
Social Sci/Fine Arts/Humanities/Comm	3	#	
BIOL 2134- Principles of Botany (ACTS= BIOL 1034)	4		
BIOL 3043- Conservation	3		
CHEM 3111- Environmental Seminar	1	#	
Total hours	14	GPA	<b>APPLY FOR GRADUATION</b>

Sample Schedule	Milestones/Notes		
Semester 7	Hrs.	Grade	Semester 7
BIOL 3054- Microbiology	4		
BIOL 3114- Principles of Ecology	4		
GEOL 3083- Hydrogeology	3		
CHEM 4414- Instrumental Analysis	4	#	
Total hours	15	GPA	

Sample Schedule	Milestones/Notes		
Semester 8	Hrs.	Grade	Semester 8
CHEM 4111- Environmental Seminar	1	#	
CHEM 4991-4- Special Problems in Chemistry <b>OR</b> CHEM 4951-4- Undergraduate Research in Chemistry	1-4	#	<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
General Elective	6-9		
Total Hours	11	GPA	

General Electives: 6 to 9 hours (1000-4000 level) as needed to earn 120 total hours

# 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)
COMM 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)
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