

**2019-2020 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 \_\_\_ ENGL 0404 \_\_\_ READ 0103 \_\_\_ MATH 0803 \_\_\_ MATH 1003 \_\_\_ MATH 0903 \_\_\_ MATH 0900 \_\_\_ MATH 1113 \_\_\_ MATH 1110 \_\_\_ MATH 1203 \_\_\_ MATH 1914 \_\_\_

**Sample Schedule**

Semester 1	Hrs.	Grade	Milestones/Notes	Semester 1
ENGL 1013- Comp I (ACTS=ENGL 1013)	3	#		
MATH2243- Calc. for Bus. & Econ. (ACTS=MATH 2203)	3	#	MATH 2914 may substitute	
PHSC 1001- Orientation to Physical Science	1			
PHSC 1004- Principles of Environmental Science	4			Milestone
CHEM 2124/2120- General Chemistry I (ACTS= CHEM 1414)	4	#		
				Milestone
<b>Total hours</b>	<b>15</b>	<b>GPA</b>		

Semester 2	Hrs.	Grade	Milestones/Notes	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			
<b>Total hours</b>	<b>17</b>	<b>GPA</b>		

Semester 3	Hrs.	Grade	Milestones/Notes	Semester 3
U.S. History & Government	3			
STAT 2163 or PSY/SOC 2053- Stat. Meth or Stats-Behv	3			
COMS 2003*- Microcomp. Apps. or COMS2803:Prog. in C	3		*(COMS 2003 prereq.= COMS 1003)	
PHYS 2014/2000- Physical Principles I (ACTS= PHYS 2014)	4			Milestone
CHEM 3254- Fund. of Organic Chemistry	4	#		Milestone
<b>Total hours</b>	<b>17</b>	<b>GPA</b>		

Semester 4	Hrs.	Grade	Milestones/Notes	Semester 4
PHYS 2024/2010- Physical Principles II (ACTS= PHYS 2024)	4			
CHEM 2111- Environmental Seminar	1	#		
CHEM 3245- Quantitative Analysis	5	#		
CHEM 3264- Mechanistic Organic Chemistry	4	#		
<b>Total hours</b>	<b>14</b>	<b>GPA</b>	<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 at <http://acts.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 United States History to 1877 (ACTS=HIST2113)
TH 2273 Introduction to Theatre (ACTS=DRAM 1003)	HIST 2043 Honors United States History to 1877
ENGL 2173 Introduction to Film	HIST 2013 United States History since 1877 (ACTS=HIST2123)
JOUR 2173 Introduction to Film	POLS 2003 American Government (ACTS=PLSC2003)
ENGL 2183 Honors Introduction to Film	<b>Communication Courses</b>
ENGL 2003 Introduction to World Literature (ACTS=ENGL2113)	COMM 1003 Intro to Speech Comm
ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)	COMM 2003 Public Speaking
ENGL 2023 Honors World Literature	COMM 2173 Business and Professional Speaking
PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)	
PHIL 2043 Honors Introduction to Philosophy	
PHIL 2053 Introduction to Critical Thinking (ACTS=PHIL 1003)	

**Sample Schedule**

Semester 5	Hrs.	Grade	Milestones/Notes	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	#		
<b>Total hours</b>	<b>17</b>	<b>GPA</b>		

Semester 6	Hrs.	Grade	Milestones/Notes	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	#		
<b>Total hours</b>	<b>14</b>	<b>GPA</b>	<b>APPLY FOR GRADUATION</b>	

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

Semester 8	Hrs.	Grade	Milestones/Notes	Semester 8
CHEM 4111- Environmental Seminar	1	#		
CHEM 4991-4- Special Problems in Chemistry OR 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			
<b>Total Hours</b>	<b>11</b>	<b>GPA</b>		

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 1543 Honors World History to 1500
HIST 2003 U.S. History to 1877 (ACTS=HIST2113)
HIST 2013 U.S. History since 1877 (ACTS=HIST2123)
HIST 2043 Honors U.S. History to 1877
HIST 1903 Survey of American History
POLS 2003 American Government (ACTS=PLSC2003)
ECON 2003 Principles of Economics I (ACTS=ECON2103)
ECON 2103 Honors Principles of Economics I
ECON 2013 Principles of Economics II (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