

**2016-2017 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 <http://www.atu.edu/academics/catalog/>.

**Possible careers include: Medical, Dental, Biophysicist, Chemical Engineer, Chemical Technician, Conservation Scientist, Environmental Engineer, Food Technologist, Forensic Science Technician, Industrial Air Pollution Analyst, Industrial Waste Inspector, Materials Scientist, Microbiologist, Pharmacist, Soil Scientist, Toxicologist, Water Pollution Control Inspector**

#Remedial Courses (if applicable): ENGL 0303 \_\_\_\_\_ ENGL 0404 \_\_\_\_\_ READ 0103 \_\_\_\_\_ MATH 0903 \_\_\_\_\_

Sample Schedule	Milestones/Notes	
<b>Semester 1</b>	<b>Hrs.</b>	<b>Semester 1</b>
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. Milestone
PHSC1001: Orientation to Physical Science	1	
CHEM2124/2120: General Chemistry I (ACTS= CHEM 1414)	4 #	Milestone
Total hours	15 GPA	

Sample Schedule	Milestones/Notes	
<b>Semester 2</b>	<b>Hrs.</b>	<b>Semester 2</b>
ENGL 1023: Comp II (ACTS= ENGL 1023)	3 #	
BIOL1114: Principles of Biology (ACTS= BIOL 1014)	4	
MATH2924: Calculus II (ACTS= MATH 2505)	4	
PHSC1011:Orientation to Physical Science II (MANDATORY)	1	
CHEM2134/2130: General Chemistry II (ACTS= CHEM 1424)	4 #	Milestone
Total hours	16 GPA	

Sample Schedule	Milestones/Notes	
<b>Semester 3</b>	<b>Hrs.</b>	<b>Semester 3</b>
Social Science	3	
PHYS 2014/2000:Phys. Princ. I or PHYS2114/2000:Gen. Phys	4	(ACTS= PHYS 2014 or 2034)
COMS2003*:Microcomp. Apps. or COMS2803:Prog. in C	3	*(COMS 2003 prereq.= COMS 1003)
CHEM3254: Fund. of Organic Chemistry	4 #	Milestone
Total hours	14 GPA	

Sample Schedule	Milestones/Notes	
<b>Semester 4</b>	<b>Hrs.</b>	<b>Semester 4</b>
U.S. History & Government	3	
PHYS 2024/2010:Phys. Princ. II or PHYS2124/2010:Gen. Phys	4	(ACTS= PHYS 2024 or 2044)
CHEM3245: Quantitative Analysis	5 #	
CHEM3264: Mechanistic Organic Chemistry	4 #	
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 at <http://acts.adhe.edu/>

<b>Fine Arts and Humanities</b> ART 2123 Experiencing Art (ACTS=ARTA1003) MUS 2003 Introduction to Music (ACTS=MUSC1003) TH 2273 Introduction to Theatre (ACTS=DRAM 1003) ENGL 2173 Introduction to Film JOUR 2173 Introduction to Film ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) ENGL 2013 Intro. to American Literature (ACTS=ENGL2653) ENGL 2023 Honors World Literature PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103) PHIL 2043 Honors Introduction to Philosophy	<b>U.S. History &amp; Government</b> HIST 1903 Survey of American History HIST 2003 United States History to 1877 (ACTS=HIST2113) HIST 2043 Honors United States History to 1877 HIST 2013 United States History from 1877 (ACTS=HIST2123) POLS 2003 American Government (ACTS=PLSC2003) <b>Communication Courses</b> COMM 1003 Intro. to Speech Com. (ACTS=SPCH1003) COMM 2003 Public Speaking COMM 2173 Business and Professional Speaking
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Prerequisites (if applicable):MATH 1914(ACTS=MATH1305) \_\_\_\_\_ OR MATH 1203(ACTS=MATH1203) \_\_\_\_\_

Sample Schedule	Milestones/Notes	
<b>Semester 5</b>	<b>Hrs.</b>	<b>Semester 5</b>
Fine Arts & Humanities	3	
BIOL2124: Principles of Zoology (ACTS= BIOL 1054)	4	
CHEM3301: Chemistry Seminar	1 #	
CHEM3344: Principles of Biochemistry	4 #	
General Elective	4	Recommend Statistics or ENGL2053
Total hours	16 GPA	

Sample Schedule	Milestones/Notes	
<b>Semester 6</b>	<b>Hrs.</b>	<b>Semester 6</b>
BIOL2014: Human Anatomy (ACTS=BIOL 2404)	4	
BIOL3034: Genetics	4	
CHEM3423: Descriptive Inorganic Chemistry	3 #	
CHEM3363: Metabolic Biochemistry	3 #	
Total hours	14 GPA	<b>APPLY FOR GRADUATION</b>

Sample Schedule	Milestones/Notes	
<b>Semester 7</b>	<b>Hrs.</b>	<b>Semester 7</b>
BIOL3074: Human Physiology or BIOL3174:Physiological Ecology	4	
CHEM3324: Physical Chemistry I	4 #	Pre-req: PHYS 2114
CHEM4414: Instrumental Analysis	4 #	
CHEM Elective (3000-4000 level)	3	Recommend Statistics or ENGL2053
CHEM4991:Spcl Probs.Chem. OR CHEM4951: UG Rsrch in Chem.	1	
Total hours	16 GPA	

Sample Schedule	Milestones/Notes	
<b>Semester 8</b>	<b>Hrs.</b>	<b>Semester 8</b>
Fine Arts & Humanities	3	
Social Sci/Fine Arts/Humanities/Comm	3	
BIOL4033: Cell Biology	3	Min. hours 3000-4000 level courses: 40
CHEM4401: Chemistry Seminar	1 #	No more than 4 PE activity hours
CHEM4991:Spcl Probs.Chem. OR CHEM4951: UG Rsrch in Chem.	1	Min. hours required:120
General Elective	2	No more than 12 hours of D's.
Total Hours	13 GPA	

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

# indicates a "C" or better is required

HIST 1503 World Civilization to 1500 (ACTS=HIST1113) HIST 1513 World Civilization since 1500 (ACTS=HIST1123) HIST 1543 Honors World Civilization 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	<b>Social Sciences</b> 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
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