Biochemistry major

Common course work for Pre-Med, Pre-Dentistry, Pre-Pharmacy, and other professional programs. No minor is required.

This course plan exceeds most professional school's entrance requirements; however it gives you the best chance of being accepted and also being successful in the professional program. It is a good idea to keep in contact with the schools to which you plan on applying. If you would like a different major, see your pre-professional advisor.

11 , 0 ,	Fall Semester, Year 1	Hours		Spring Semester, Year 1	Hours
ENGL 1013	Composition I	3	ENGL 1023	Composition II	3
ACTS ENGL 1013			ACTS ENGL 1023		
MATH 1043	College Algebra	3	MATH 1033	Trigonometry	3
ACTS MATH 1103			ACTS MATH 1203		
CHEM 1121	General Chemistry I Lab	1	CHEM 1113	General Chemistry II	3
ACTS CHEM 1414			ACTS CHEM 1424		
CHEM 1103	General Chemistry I	3	CHEM 1131	General Chemistry II Lab	1
ACTS CHEM 1414	B : : 1	4	ACTS CHEM 1424	B :	
BIOL 2041	Principles of Biology I Lab	1	BIOL 2083	Principles of Biology II	3
BIOL 2053	Principles of Biology I *(6)	3	BIOL 2091	Principles of Biology II Lab	1
BIOL 2053	Filliciples of Biology ((0)	3	ACTS BIOL 1014	Filliciples of Biology II Lab	_
			*(2)	Social Sciences General Ed Req #1	3
		14	Total	Social Sciences deficial Ed Req #1	17
	Fall Competer Veer 2	l	TOtal	Spring Somestor, Voca 3	L
CLIENA 2 404	Fall Semester, Year 2	Hours		Spring Semester, Year 2	Hours
CHEM 3404	Organic Chemistry I	4		Minor or General Elective	3
	Minor Elective	3	BIOL 3553	Microbiology	3
MATH 2255	Calculus I	5	BIIOL 3561	Microbiology Lab	1
ACTS MATH 2405					
*(3)	Speech General Ed Req	3	CHEM 3414	Organic Chemistry II	4
			*(5)	History or Gov. General Ed Req	3
Total		15	Total		14
	Fall Semester, Year 3	Hours		Spring Semester, Year 3	Hours
PHYS 2203	College Physics I	3	PHYS 2213	College Physics II	3
ACTS PHYS 2014	or	or	ACTS PHYS 2024	or	or
or	University Physics I	3	or	University Physics II	3
PHYS 2313			PHYS 2323		
ACTS PHYS 2034			ACTS PHYS 2044		
PHYS 2231	Gen & Univ. Physics I Lab	1	PHYS 2241	Gen. & Univ. Physics II Lab	1
ACTS PHYS			ACTS PHYS 2024/2044		
2014/2034					
BIOI 3354	Genetics	4		Cell Biology	3
BIOL 3354	Genetics Oughtitative Analysis	4	BIOL 3363	Cell Biology	3
CHEM 3314	Quantitative Analysis	4	BIOL 3363 BIOL 3763	Evolution	3
CHEM 3314 *(2)		4 3	BIOL 3363 BIOL 3763 CHEM 3424		3 4
CHEM 3314	Quantitative Analysis Social Sciences General Ed Req #2	4 3 15	BIOL 3363 BIOL 3763	Evolution Elements of Physical Chemistry	3
CHEM 3314 *(2) Total	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4	4 3 15 Hours	BIOL 3363 BIOL 3763 CHEM 3424	Evolution Elements of Physical Chemistry Spring Semester, Year 4	3 4 14
CHEM 3314 *(2)	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective	4 3 15 Hours 3-4	BIOL 3363 BIOL 3763 CHEM 3424	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor	3 4 14
CHEM 3314 *(2) Total BIOL/CHEM	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective Minor	4 3 15 Hours 3-4 3	BIOL 3363 BIOL 3763 CHEM 3424 Total	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor Minor	3 4 14 3 3
*(2) Total BIOL/CHEM CHEM 4633	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective Minor Biochemistry I	4 3 15 Hours 3-4 3	BIOL 3363 BIOL 3763 CHEM 3424 Total	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor Minor Biochemistry II	3 4 14 3 3 3
CHEM 3314 *(2) Total BIOL/CHEM CHEM 4633 *(4)	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective Minor Biochemistry I Humanities Gen Ed Req	4 3 15 Hours 3-4 3 3	BIOL 3363 BIOL 3763 CHEM 3424 Total CHEM 4643 CHEM 4731	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor Minor Biochemistry II Biochemistry Lab	3 4 14 3 3 3 1
*(2) Total BIOL/CHEM CHEM 4633	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective Minor Biochemistry I	4 3 15 Hours 3-4 3	BIOL 3363 BIOL 3763 CHEM 3424 Total	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor Minor Biochemistry II Biochemistry Lab Advanced Lab Techniques *(7)	3 4 14 3 3 3 1 2
CHEM 3314 *(2) Total BIOL/CHEM CHEM 4633 *(4)	Quantitative Analysis Social Sciences General Ed Req #2 Fall Semester, Year 4 Biology or Chem Upper Level Elective Minor Biochemistry I Humanities Gen Ed Req	4 3 15 Hours 3-4 3 3	BIOL 3363 BIOL 3763 CHEM 3424 Total CHEM 4643 CHEM 4731	Evolution Elements of Physical Chemistry Spring Semester, Year 4 Minor Minor Biochemistry II Biochemistry Lab	3 4 14 3 3 3 1

A student with a good math background may elect to take Calculus I as the first college math course. If this is the case, College Algebra and Trigonometry may be waived; however, additional hours may be needed to reach the 120 hours needed for graduation.

Students required to enroll in remedial courses will need to take additional hours per term, or attend summer school.

A minor is required for this major. Any minor may be chosen; however, the most common minors selected for this major are chemistry, natural science, or physics. Some minors may require more than 18 hours. Some minors may be completed with fewer hours since some courses are listed as biology supportive requirements. See the current catalog and your advisor for specific minor requirements.

- *(1) Fine Arts Appreciation can be either ART 1053 Art Appreciation (ACTS ARTA 1003) or MUS 1113 Music Appreciation (ACTS MUSC 1003)
- *(2) Social Sciences Gen Ed Requirements can be filled with two courses of the following from two different disciplines:

 ANTH 2203 (ACTS ANTH 2013) Cultural Anthropology, CJ 1013(ACTS CRJU 1023) Introduction to Criminal Justice, ECON 2203 (ACTS ECON 2103) Principles of Macroeconomics, ECON 2213 (ACTS ECON 2203) Principles of Microeconomics, GEOG 2213 (ACTS GEOG 1103) Geography I, GEOG 2223 Geography II, HIST 1013 (HIST 1113) Surv of Civ I, HIST 1023 (ACTS HIST 1123) Survey of Civ II, PSY 1013 (ACTS PSYC 1103) Introduction to Psychology, SOC 2213 (ACTS SOCI 1013) Introduction to Sociology, SWK 1013 Introduction to Social Work. If you are applying to medical school at UAMS and other colleges of medicine, you should take PSY 1013 (ACTS PSYC 1103) Introduction to Psychology, SOC 2213 (ACTS SOCI 1013) Introduction to Sociology to complete your social science electives. These courses will be required courses at most colleges of medicine and material from these courses will be on the MCAT exam. It may be a good idea to take PSY 2203 Statistical Methods as a general elective to help prepare you for material that will be on the new MCAT exams.
- *(3) Speech General Ed Requirement can be: COMM 1023(ACTS SPCH 1003) Public Speaking, COMM 2283 Business and Prof. Speech, or COMM 2203 Interpersonal Communication
- *(4) Humanities General Ed. Requirement can be: ENGL 2283(ACTS ENGL 2113) World Lit I or ENGL 2293(ACTS ENGL 2123) World Lit II
- *(5) History or Government General Ed. Requirement can be: HIST 2213(ACTS HIST 2113) American History I, HIST 2223(ACTS HIST 2123) American History II, or PSCI 2213 (ACTS PLSC 2003) American National Government
- *(6) The prerequisite to enter Principles of Biology I is a composite ACT = 22 or greater, or completion of BIOL 1063, Introduction to Biological Sciences with a grade of C or higher.
- *(7) Advanced Lab Techniques may be replaced with CHEM 4611, Chemistry Seminar; or CHEM 4691, Senior Research; however, additional hours may be needed to reach the 120 minimum.