



College of: Arts & Sciences Degree/Major: BS/Biochemistry & Molecular Biology Academic Year: 2014-15

Proposed Four-Year Degree Plan

The following is an example 8-semester plan. This is used to illustrate the course sequencing and the expectations for course loading. Students may use this as a guide as they plan their undergraduate education, but should adjust it to fit their personal goals. Students are responsible for completing requirements in the official degree sheet for each major. It is mandatory for a student to meet with an academic advisor prior to course enrollment each semester.

- Assumption:** 1) Entering students have 2 years of a foreign language from high school.
2) Entering students have sufficient preparation to place into MATH 2144 (Calculus I).

Current Course Rotation: (F) = Fall only (S) = Spring only
Students must refer to the current course catalog for the availability of course offerings as well as visit with their academic advisor to find out about any special offerings.

Year One					
Fall Semester			Spring Semester		
A&S	1111	Freshman Orientation	ENGL	1213	Freshman Composition II
BIOC	1990(1)	Freshman Research in Biochemistry	BIOL	1114	Introductory Biology
CHEM	1314	General Chemistry I	CHEM	1515	General Chemistry II
ENGL	1113	Freshman Composition I	STAT or MATH	2013 or 4013 or 2153	Elementary Statistics or Statistical Methods or Calculus II
MATH	2144	Calculus I			
HIST	1103	Survey of American History			
Total: 16 credit hours			Total: 15 credit hours		
Getting involved with student organizations will further your classroom experiences.			Start looking into 2nd Major or Minor; most minors are 15 - 18 hours.		

Year Two					
Fall Semester			Spring Semester		
CHEM	2113	Principles of Analytical Chemistry (F)	CHEM	3153	Organic Chemistry II
CHEM	3053	Organic Chemistry I	CHEM	3112	Organic Chemistry Lab (S)
ZOOL or BOT	1604 or 1404	Animal Biology or Plant Biology	MICR	2123	Intro to Microbiology
POLS	1113	Intro to American Government	MICR	2132	Intro Microbiology Lab
	3 hours	Humanities	SPCH	2713	Intro to Speech Communication
Total: 16 credit hours			Total: 13 credit hours		
Interested in Study Abroad? Visit the Study Abroad Office this semester.			Interested in an internship or research? This is an ideal time to research possibilities. Register at Career services & talk to faculty about research.		

Year Three					
Fall Semester			Spring Semester		
BIOC	3713	Biochemistry I (F)	BIOC	3813	Biochemistry II (S)
PHYS	1114 or 2014	General Physics I	BIOC	3723	Analytical Biochemistry and Molecular Biology Lab
	3 hours	Arts & Humanities	BIOL or ANSI or BOT	3023 or 3423 or 3554	General Genetics or Animal Genetics or Plant Genetics
	3 hours	Upper-Division Social Science with Diversity	PHYS	1214 or 2114	General Physics II
	1 course from	Physiology Electives – See Advisor		3 hours	Upper-Division Humanities with International
Total: 16-18 credit hours			Total: 16 credit hours		
Interested in an internship? This is an ideal time to research possibilities.			If you are interested in departmental honors, apply this semester.		

Between Years Three and Four, contact your advisor about an official graduation check.

Year Four					
Fall Semester			Spring Semester		
BIOC	4990(2)	Special Problems	BIOC	4224	Physical Chemistry for Biologists (S)
	3 hours	Social Science	BIOC	4883	Senior Seminar in Biochemistry (S)
	3 hours	Related Courses – See Advisor		1-3 hours	Related Courses – See Advisor (1 hour may need to be Upper-Division)
	3 hours	Upper-Division Electives		3 hours	Upper-Division Electives
	4 hours	Upper-Division Electives			
Total: 15 credit hours			Total: 11-13 credit hours		
Be prepared to apply for Spring graduation this semester. Check on 2nd Major or Minor.			Celebrate your accomplishment at May Graduation with your fellow Cowboys!!		

OTHER REQUIREMENTS:

The College of Arts & Sciences requires 6 hours Upper-Division General Education outside the major department.

Total hours must include at least 40 hours in courses numbered 3000 or above.

Hours in one department in excess of 54 will be added to the minimum total of 120 required for graduation.

1. GENERAL EDUCATION REQUIREMENTS

a. No more than two courses (or eight hours) from the major department may be used to meet General Education and College and Departmental Requirements. The General Education Controlled Elective required English Composition, required U.S. History, required American Government, and one required MATH course do not count against the two-course maximum.

b. The Diversity, International Dimension, Scientific Investigation and Non-Western requirements may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).

c. Courses in the major department may not be used to satisfy the College requirement for six hours upper-division General Education.

2. A&S COLLEGE/DEPARTMENTAL REQUIREMENTS

a. Arts and Humanities are defined as any course carrying an (H) designation or courses from ART, HIST, MUSI, PHIL (except 1313 and 3003), REL, TH, creative writing, foreign languages (second year and above), linguistics and literature. No more than six hours may be music or theatre performance or art studio.

b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, BOT, CHEM, CS (except 4883), GEOL, MATH, MICR, PHYS, STAT and ZOOL; or courses from other departments that carry an (A) or (N) general education designation.

c. Non-Western Studies Requirement for B.A. and B.F.A. – consult academic advisor

3. FOREIGN LANGUAGE PROFICIENCY

a. The foreign language requirement for the B.A. may be satisfied by 10 hours college credit in the same language, or equivalent proficiency (e.g., passing an advanced standing examination; completing a second-year or higher college-level course in the language, etc.).

b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second year level of study). It may also be satisfied by any of the options listed above for the B.A.

c. In addition to a. and b., students pursuing secondary education teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 5 hours college credit in the same language with no grade below C (or pass an advanced standing examination equivalent to 5 hours of college credit).

4. EXCLUSIONS

a. Courses used to satisfy the English Composition, American History and Government requirement will not count toward the 54 hour maximum allowed from one department.

b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit in the College of Arts & Sciences.