



College of: Arts & Sciences Degree/Major: BS/Biochemistry & Molecular Biology Academic Year: 2015-16

Proposed Four-Year Degree Plan (120 Total Hours)

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, one required MATH course, and required foreign language for B.A. degrees do not count against the two-course maximum.

b. The Diversity, International Dimension, and Scientific Investigation 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).

2. A&S COLLEGE/DEPARTMENTAL REQUIREMENTS

a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, ENGL (except 3323), HIST, MUSI, PHIL(except 1313 and 3003), REL, TH, and foreign languages (second year and above). 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. The required six hours of upper-division General Education may not include courses from the student's major department. This requirement 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).

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

e. The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses.

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. utilizing elective hours.

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.