

College of: Arts & Sciences Degree/Major: BS/Microbiology-Cell & Molecular Biology Academic Year: 2016-2017

**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 1513 (College Algebra).

\* indicates suggested items to consider to help be competitive and/or for professional testing preparation

**Current Course Rotation:** (F) = Fall only (Sp) = 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.*

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| Year One | | | | | |
| Fall Semester | | | Spring Semester | | |
| A&S | 1111 | First Year Seminar | ENGL | 1213 | Freshman Composition II |
| ENGL | 1113 | Freshman Composition I | HIST | 1103 | Survey of American History |
| POLS | 1113 | Intro to American Government | CHEM | 1314 | General Chemistry I |
| MATH | 1513 | College Algebra (or higher level Math\*) | BIOL or BOT | 1604 or  1404 | Animal Biology or  Plant Biology |
| BIOL | 1114 | Introductory Biology |  | 2 hours | Electives |
|  | 2 hours | Additional General Education |  |  |  |
| Total: 16 credit hours | | | Total: 16 credit hours | | |
| Get involved in clubs. | | | Consider lab research opportunities | | |

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| Year Two | | | | | |
| Fall Semester | | | Spring Semester | | |
|  | 3 hours | Upper-Division Humanities (H) with International (I) |  | 3 hours | Social Sciences (S) with Diversity (D) |
| CHEM | 1515 | General Chemistry II | CHEM | 3015 | Organic Compounds |
| MICR | 2123 | Intro to Microbiology | MICR | 4001 | Professional Transitions |
| MICR | 2132 | Intro Microbiology Lab | MICR | 3033 | Cell & Molecular Biology |
|  | 3 hours | Electives |  | 3 hours | Electives |
| Total: 16 credit hours | | | Total: 15 credit hours | | |
| Interested in Study Abroad? Explore your options. | | | Registrar with Career services. Continue looking for internships. | | |

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| Year Three | | | | | |
| Fall Semester | | | Spring Semester | | |
|  | 3 hours | Humanities (H) | PHYS | 1114 | General Physics I |
| ANSI or BIOL | 3423 or  3023 | Animal Genetics or  General Genetics | MICR | 3253 | Immunology (Sp) |
| MICR | 3223 | Advanced Microbiology | MICR | 5 hours | Upper-Division MICR (not 3103) |
| MICR | 4012 | Molecular Microbiology Lab 1 (F) |  | 3 hours | Electives |
|  | 4 hours | Electives |  |  |  |
| Total: 15 credit hours | | | Total: 15 credit hours | | |
| Meet with Career Services to perfect your resume | | |  | | |

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

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| Year Four | | | | | |
| Fall Semester | | | Spring Semester | | |
|  | 3 hours | Additional General Education |  | 3 hours | Additional General Education |
|  | 3 hours | Arts & Humanities | BIOC | 3653 | Survey of Biochemistry |
| MICR | 4133 or  4253 or  4263 | Molecular & Microbial Genetics (F) or  Concepts in Medical Genetics (F) or  Eukaryotic Genetics | MICR | 4112 | Molecular Microbiology Lab 2 |
| MICR | 5 hours | Upper-Division MICR (not 3103) | MICR | 4233 | Advanced Cell & Molecular Biology |
|  | 2 hours | Electives |  |  |  |
| Total: 16 credit hours | | | Total: 11 credit hours | | |
| Be prepared to apply for spring graduation this semester. Prepare for interviews and contingency plan. | | | 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**

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 required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

**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, 3003 and 4003), 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).

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.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 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.), utilizing elective hours.

b. In addition to a., 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.