



College of: Arts and Sciences Degree/Major: BS/Microbiology-Cell & Molecular Biology Academic Year: 2018-2019

### 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).

**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.

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 recommended for professional school preparation)	BIOL or PBIO	1604 or 1404	Animal Biology or Plant Biology
BIOL	1114	Introductory Biology		2 hours	Electives
Total: 14 credit hours			Total: 16 credit hours		
Get involved in student organizations to further your experiences.			Consider lab research opportunities.		

Year Two					
Fall Semester			Spring Semester		
	3 hours	Humanities (H)		3 hours	Social Sciences (S) with Diversity (D)
	3 hours	Additional General Education (A, H, N or S)	CHEM	3015 or 3053	Organic Compounds or Organic Chemistry
CHEM	1515	General Chemistry II		2 hours	Upper-Division MICR (if taking CHEM 3053)
MICR	2123	Intro to Microbiology	MICR	3033	Cell & Molecular Biology
MICR	2132	Intro Microbiology Lab		3 hours	Electives
Total: 16 credit hours			Total: 14 credit hours		
Interested in Study Abroad? Visit the Study Abroad Office to prepare.			Registrar with Career services. Continue looking for internships.		

Year Three					
Fall Semester			Spring Semester		
	3 hours	Upper-Division Humanities (H) with International (I)	BIOC	3653 or 3713	Survey of Biochemistry or Biochemistry I
MICR	4001	Professional Transitions	PHYS	1114	General Physics I
ANSI or BIOL	3423 or 3023	Animal Genetics or General Genetics	MICR	3 hours or 3 hours	Upper-Division MICR (if took CHEM 3153) or Electives (if took CHEM 3015)
MICR	3223	Advanced Microbiology	MICR	3253	Immunology (Sp)
CHEM	3153 or 3 hours	Organic Chemistry II (if took CHEM 3053) or Upper-Division MICR (if took CHEM 3015)	CHEM	3112 or 2 hours	Organic Chemistry Laboratory (Sp) (if took CHEM 3153) or Upper-Division MICR (if took CHEM 3015)
MICR	4012	Molecular Microbiology Lab 1 (F)		1 hour	Elective
Total: 15 credit hours			Total: 16 credit hours		
Meet with Career Services to perfect your resume.					

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

Year Four					
Fall Semester			Spring Semester		
	3 hours	Additional General Education (A, H, N, or S)		3 hours	Arts & Humanities
MICR	4253 or 4263	Concepts in Medical Genetics (F) or Eukaryotic Genetics		3 hours	Upper-Division Additional General Education (A, H, N, or S) (not MICR)
MICR	5 hours	Upper-Division MICR (not 3103)	MICR	4112	Molecular Microbiology Lab 2
BIOC	3813 or 3 hours	Biochemistry II (if took BIOC 3713) or Electives (if took BIOC 3653)	MICR	4233	Advanced Cell & Molecular Biology
				4 hours	Electives
Total: 14 hours			Total: 15 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 and 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.**

**At least 60 hours must be completed at a four-year institution. At least 30 hours must be completed at OSU.**

**15 of the final 30 hours completed, or 50% of the upper-division hours in the major field must be completed at OSU.**

**Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.**

#### **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. CAS COLLEGE/DEPARTMENTAL REQUIREMENTS**

a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except 3323) HIST, MUSI, PHIL (except 1313, 3003 and 4003), REL, TH, and foreign languages.

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, and STAT; or any courses 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 and 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**

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 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.

c. In addition to a. and b., **students pursuing 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 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

#### **4. EXCLUSIONS**

a. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements 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.