



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.

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		

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.		

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.

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.**

**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. 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.