



College of: Arts and Sciences Degree/Major: BS/Biochemistry Academic Year: 2018-19

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 (Sp) = Spring only (+) = Course offered every other year
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 |
| HIST | 1103 | Survey of American History | BIOL | 1114 | Introductory Biology |
| CHEM | 1314 | Chemistry I | CHEM | 1515 | 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 | | | |
| Total: 15 credit hours | | | Total: 15 credit hours | | |
| Get involved with student organizations to further your experiences. | | | Register with Career Services for countless opportunities. It's free! | | |

| Year Two | | | | | |
|--|-----------------|------------------------------------|---|-----------------|---|
| Fall Semester | | | Spring Semester | | |
| CHEM | 3053 | Organic Chemistry I | CHEM | 3153 | Organic Chemistry II |
| BIOL or IBIO | 1604 or 1404 | Animal Biology or Plant Biology | CHEM | 3112 | Organic Chemistry Lab |
| MICR | 2123 | Intro to Microbiology | PHYS | 1114 or 2014 | College Physics I (Algebra-based) or University Physics I (Calculus-based) |
| MICR | 2132 | Intro to Microbiology Lab | POLS | 1113 | Intro to American Government |
| | 3 hours | Humanities (H) | | 3 hours | Additional General Education (A, H, N, S) |
| Total: 15 credit hours | | | Total: 15 credit hours | | |
| Want to Study Abroad? Visit the Study Abroad Office for more info! | | | Start looking into a 2nd Major or Minor; most minors are 15 - 18 hours. | | |

| Year Three | | | | | |
|---|-----------------|---|--|----------------------------|--|
| Fall Semester | | | Spring Semester | | |
| BIOC | 3713 | Biochemistry I | BIOC | 3813 | Biochemistry II |
| CHEM | 2113 | Principles of Analytical Chemistry (F) | BIOC | 3723 | Biochemistry and Molecular Biology Lab |
| | 3 hours | Arts & Humanities | BIOL or ANSI or PLNT | 3023 or 3423 or 3554 | General Genetics or Animal Genetics or Plant Genetics |
| | 3 hours | Upper-Division Social Science (S) with Diversity (D) | | 1 course from | BIOL 3204; BIOL 3214; MICR 3223; or PBIO 4463 – See Advisor |
| PHYS | 1214 or 2114 | College Physics II (Algebra-based) or University Physics II (Calculus-based) | | 3 hours | Upper-Division Humanities (H) with International (I) |
| Total: 16 credit hours | | | Total: 15-17 credit hours | | |
| Interested in conducting research? This is an ideal time discuss opportunities with to faculty. | | | 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 | | |
| | 2 hours From | BIOC 4990; CHEM 4320(3); CHEM 4990; MICR 4112; or MICR 4990 – See Advisor | BIOC or CHEM | 3223 or 3413 | Physical Chemistry for Biologists (Sp) Physical Chemistry Applications (F) |
| | 4 hours | Additional General Education (A, H, N, S) | BIOC or MICR or CHEM | 4883 or 4233 or 4313 | Senior Seminar in Biochemistry (Sp) or Advanced Cell & Molecular Biology (Sp) or Medicinal Organic Chemistry (F ⁺) |
| | 3 hours | Related Courses in BIOL, CHEM, or MICR – See Advisor | | 3 hours | Related Courses in BIOL, CHEM, or MICR – See Advisor |
| | 3 hours | Electives (may need to be Upper-Division) | | 3-5 hours | Electives |
| | 3 hours | Electives | | | |
| Total: 15 credit hours | | | Total: 13-15 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 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.

