BS – Microbiology with Biochemistry minor (PRE-DENT) (SC-BS/MICR/BCHM/PDMI) 2018 Catalog year: College of Science and Engineering

**Freshman Fall semester:**
- BIO 1330 (F,S)
- BIO 1331 (F,S)
- BIO 1130 (F,S)
- Functional Biology

**Freshman Spring semester:**
- CHEM 1341 (F,S,Su)
- CHEM 1141 (F,S)
- General Chemistry 1

**Sophomore Fall semester:**
- BIO 2450 (F,S,Su)
- Genetics

- BIO 2400 (F,S)
- Microbiology

**Sophomore Spring semester:**
- CHEM 2341 (F,S,Su)
- CHEM 2141 (F,S,Su)
- Organic Chemistry 1

**Junior Fall semester:**
- PHYS 1315 (F,S,Su)
- PHYS 1115 (F,S,Su)
- General Physics I

**Junior Spring semester:**
- PHYS 1325 (F,S,Su)
- PHYS 1125 (F,S,Su)
- General Physics II

**Senior Fall semester:**
- Elective hours (as needed, see advisor)

**Senior Spring semester:**
- BIO 2446 (S) – Microbial Ecology
- BIO 4448 (S) – Bacterial Genetics (previously BIO 4350L)

**Note:** BIO 4447 cannot count for both physiology and advanced microbiology. Only counts for one requirement. If taking BIO 4366, must also complete BIO 4166. If taking BIO 4326, must also complete 4126. Check course prerequisites.

**Fall semester:**
- BIO 1100 (S) – Cell Biology
- CHEM 3375 (F) or CHEM 4375 (F,S)
- Biochemistry

**Spring semester:**
- CHEM 2342 (F,S,Su) & CHEM 2142 (F,S,Su)
- Organic Chemistry II
- CHEM 3276 (F,S)
- Experimental Biochem

**11-12 hours from:**
- BIO 3442 (F,S) – Virology
- BIO 4326/4426 (F,S) – Immunology
- BIO 4366/4466 (F,S) – Medical Microbiology
- BIO 4376/4476 – Microbial Biotech (previously BIO 4350R)
- BIO 4413 (F) – Parasitology (instructor approval req.)
- BIO 3430 (F) – Mycology
- BIO 4480 (F) – Cytology & Microtechnique
- BIO 4447 (F) – Microbial Phys & Genetics
- BIO 4446 (S) – Microbial Ecology
- BIO 4448 (S) – Bacterial Genetics (previously BIO 4350L)

- 3-4 hours advanced biology electives, chosen in consultation with an academic advisor.

- BIO 4299 requires faculty and departmental approval to count towards advanced electives and must be taken twice. Check course prerequisites.

- DO NOT COUNT: BIO 3351, 4305, 4402, 4403, 4408

**Junior Fall semester:**
- BIO 4301 (F,S)
- General Ecology

**Junior Spring semester:**
- BIO 3421 (F,S)
- Vertebrate Physiology

**Senior Fall semester:**
- Choose one set:
  - MATH 2321 (F,S,Su) & MATH 2328 (F,S,Su)
  - MATH 2471 (F,S,Su) & MATH 2328 (F,S,Su)

**Note:** Advising Center for advising chart is intended to be used by students who start out at Texas State. Please contact the College of Science Undergraduate Advising Center for advising.

**Key:**
- Arrows indicate prerequisites.
- Arrows with dashed lines indicate corequisites.
- Arrows with dash lines are recommended prerequisites.
- Courses taught specific semesters are indicated with the following codes:
  - F-Fall
  - S-Spring
  - Su-Summer Session I or II
- Required WI courses: BIO 4416
- Additional WI courses: BIO 3442, 4166, 4441, 4446, 4447

**Core courses must be completed:**
- ___US 1100
- ___COMM 1310
- ___PHIL 1320
- ___ENG 1310
- ___ENG 1320
- ___ART/DAN/TH 2313
- ___HIST 1310
- ___HIST 1320
- ___PSY 2310
- ___PSY 2320
- ___ENG 1310 recommended for first semester. HIST 1310/1320 not recommended for first semester.

This is not an official degree audit and it is subject to change. This chart is intended to be used by students who start out at Texas State. Please contact the College of Science Undergraduate Advising Center for advising.

**Note:** In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.