BS – Microbiology with Biochemistry minor (PRE-PA)  (SC-BS/MICR/BCHM/PPMI)  2019 Catalog year: College of Science and Engineering

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

See advisor for guidance.

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

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.

### Freshman Fall semester
- BIO 1330 (F,S,Su) & BIO 1130 (F,S,Su) [Structural Biology]
- CHEM 1341 (F,S,Su) & CHEM 1141 (F,S,Su) [General Chemistry I]

### Freshman Spring semester
- BIO 1331 (F,S) & BIO 1131 (F,S) [Organismal Biology]
- CHEM 1342 (F,S,Su) & CHEM 1142 (F,S,Su) [Organic Chemistry II]

### Sophomore Fall semester
- BIO 2450 (F,S,Su) [Genetics]
- CHEM 2341 (F,S,Su) & CHEM 2141 (F,S,Su) [Organic Chemistry I]

### Sophomore Spring semester
- BIO 2400 (F,S) [Microbiology]
- CHEM 2342 (F,S,Su) & CHEM 2142 (F,S,Su) [Organic Chemistry II]

### Junior Fall semester
- PHYS 1315 (F,S,Su) & PHYS 1115 (F,S,Su) [General Physics I]
- 11-12 hours from:
  - BIO 3442 (F,S) - Virology
  - BIO 43264126 (F,S) - Immunology
  - BIO 43664166 (F,S) - Medical Microbiology
  - BIO 43764176 – 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)

  Note: If taking BIO 4366, must also complete BIO 4166. If taking BIO 4326, must also complete 4126. Check course prerequisites.

### Junior Spring semester
- PHYS 1325 (F,S,Su) & PHYS 1125 (F,S,Su) [General Physics II]
- BIO 3421 (F,S) [Vertebrate Physiology]
- BIO 4301 (F,S) [Evolution]
- 3 hours from:
  - CHEM 4360 (F) [AdV Biochem & Molecular Bio]
  - CHEM 4385 (S) [Metabolism]

### Senior Fall semester
- BIO 4416 (F,S) [Vertebrate Anatomy]
- BIO 4464 (F) [Vertebrate Physiology]

### Senior Spring semester
- BIO 4417 (F,S) [Vertebrate Anatomy]
- BIO 4464 (F) [Vertebrate Physiology]

### Core courses must be completed:
- ____US 1100
- ____ENG 1310
- ____ENG 1320
- ____HIST 1310
- ____HIST 1320
- ____PSY 2310
- ____PSY 2320
- ____ART/DAN/MU/TH 2313

US 1100 & ENG 1310 recommended for first semester. HIST 1310/1320 not recommended for first semester.