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

**Freshman Fall semester**
- BIO 1330 (F,S,Su) & BIO 1150 (F,S,Su)
  - General Biology

**Freshman Spring semester**
- BIO 1331 (F)
  - Organizational Biology
- CHEM 1341 (F,S,Su) & CHEM 1141 (F,S,Su)
  - General Chemistry I
- CHEM 1342 (F,S,Su) & CHEM 1142 (F,S,Su)
  - General Chemistry II

**Sophomore Fall semester**
- BIO 2450 (F,S,Su)
  - Genetics
- CHEM 2341 (F,S,Su) & CHEM 2141 (F,S,Su)
  - Organic Chemistry I
- CHEM 2342 (F,S,Su) & CHEM 2142 (F,S,Su)
  - Organic Chemistry II

**Sophomore Spring semester**
- Choose one set:
  - MATH 2321 (F,S,Su) & MATH 2328 (F,S,Su) or
  - MATH 2471 (F,S,Su) & MATH 2328 (F,S,Su)
  - See advisor for guidance.

**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**
- 11-12 hours from:
  - BIO 3442 (F,S) - Virology
  - BIO 4326/126 (F,S) - Immunology
  - BIO 4366/4166 (F,S) - Medical Microbiology
  - BIO 4376/4176 – Microbial Biotech (previously BIO 4350/R)
  - 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 4350/L)
  - Note: If taking BIO 4366, must also complete BIO 4166. If taking BIO 4326, must also complete 4126. Check course prerequisites.

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

**BS – Microbiology with Biochemistry minor (PRE-DENT) Core Requirements**

**Core courses must be completed:**
- __US 1100__
- __COMM 1310__
- __PHIL 1320__
- __ENG 1310__
- __ENG 1320__
- __HIST 1310__
- __HIST 1320__
- __POSI 2310__
- __POSI 2320__
- __PSY 1300__

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

**BS – Microbiology with Biochemistry minor (PRE-DENT) General Requirements**

**Additional WI courses:**
- BIO 4416
- BIO 4321 (F,S)
- BIO 4301 (F,S)
  - General Ecology
- BIO 4316 (F,S)
  - Evolution
- CHEM 3375 (F)
  - Or CHEM 4375 (F,S)
  - Biochemistry
- CHEM 3276 (F,S)
  - Experimental Biochem
- CHEM 4385 (S)
  - Metabolism

**BS – Microbiology with Biochemistry minor (PRE-DENT) Degree Audit Notes**

- 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.

- **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 = Fall
  - S = Spring
  - Su = Summer Session I or II

- Required WI courses: BIO 4416
- Additional WI courses: BIO 3442, 4166, 4441, 4446, 4447

- Arrows indicate prerequisites. Arrows with dotted lines indicate co-requisites. Arrows with dash lines are recommended prerequisites.