### Requirement | Recommended Courses | Units
--- | --- | ---
**1st Semester Requirements**

#### Basic Information Competence
- ENG 114  3

#### Written English Proficiency
- SPCH 150  3

#### GE 1 Oral Communication
- MATH 226  4

#### GE 1 Quantitative Reasoning also satisfies Major Lower Division
- CHEM 115  5

#### Major Lower Division
- PHY 112  1

**Totals:** 15

#### GE 1 Critical Thinking
- PHYS 111  5

#### GE 2 Physical and Biological Sciences, Category A also satisfies Major Lower Division
- BIS 101  3

#### GE 2 Behavioral and Social Sciences
- CHEM 215  5

**Totals:** 15

#### GE 1 Written Communication also satisfies University Written English Proficiency
- ENG 214  3

#### GE 2 Behavioral and Social Sciences
- BIOL 240  5

#### Major Lower Division
- CHEM 216  5

**Totals:** 16

**3rd Semester Requirements**

#### JIS: Government and California
- MATH 227  4

#### GE 2 Physical and Biological Sciences, Category C
- PHYS 121  3

#### GE 2 Humanities and Creative Arts
- BIOL 337  3

#### Major Lower Division
- BIOL 630  3

**Totals:** 16

**4th Semester Requirements**

#### JIS: History
- ENG 414  3

#### GE 2 Humanities and Creative Arts
- BIOL 525  3

#### GE 3
- BIOL 526  3

**Totals:** 16

**5th Semester Requirements**

#### University Written English Proficiency (if required)
- CHEM 130  3

#### GE 2 Behavioral and Social Sciences
- CHEM 216  5

#### Major Lower Division
- BIOL 526  3

**Totals:** 15

**6th Semester Requirements**

#### GE 2 Humanities and Creative Arts
- BIOL 355  3

#### GE 3
- BIOL 456  4

**Totals:** 15 to 20

**7th Semester Requirements**

#### GE 3
- BIOL 526  3

**Totals:** 15 to 20

**8th Semester Requirements**

#### GE 3
- BIOL 526  3

**Totals:** 12 to 17

Note: A minimum of 40 upper division units must be completed for degree.

This roadmap is a recommendation only. It is designed so that no more than two majors science classes are taken in most semesters. Meet with a major advisor early to develop a customized course plan and to determine whether you can take a course earlier or later if desired.

Department Website: [http://www.sfsu.edu/~biology/](http://www.sfsu.edu/~biology/)