B.S. in Biology (effective Fall 2016)
Suggested sequence of coursework
Total units: 180

Note: Plan assumes passage of ELM and EPT. Units are given in parentheses.

- Courses that satisfy General Education (GE) requirements are listed at the bottom of this page.
- Courses required for the Biology Major will automatically fulfill GE requirements A3, B1, B2, and B3. No additional coursework is needed to meet these requirements.
- * GE Capstone courses for GE categories B, C and D should be selected such that one of them also satisfies GE requirement G, the multicultural/gender requirement.
- ** Students without a strong background in algebra and trigonometry should take Math 110 (college algebra) and Math 120 (precalculus/trigonometry) before taking Math 192.
- "BIOL Elective" is any upper-division Biology course (excluding BIOL 301, 304, 305, 306, 314, 349 and 503). At least one of these courses must be selected from Group A and one from Group B in the upper-division requirements for the BS in Biology. CHEM 436A and 436B may count as 5 of these elective units.
- "Any Elective" is any course at any level from any department

Year 1 (44 Units)

Fall (12 Units)
- MATH 192** (4)
- ENG 107 (4)
- 2-unit GE (2)
- USTD 100A (2)

Winter (16 Units)
- CHEM 215 (6)
- 4-unit GE (4)
- 4-unit GE (4)
- 2-unit GE (2)

Spring (16 Units)
- CHEM 216 (6)
- 4-unit GE (4)
- 4-unit GE (4)
- 2-unit GE (2)
Year 2 (47-48 Units)
Recommended: Take the Physics series during Year 2 or Year 3

Fall (15-16 Units)

• BIOL 200 (5)
• CHEM 221A & B (4)
• PHYS 121 (5) or 4-unit GE (4)
• 2-unit GE (2)

Winter (17 Units)

• BIOL 201 (5)
• CHEM 222A & B (4)
• PHYS 122 (4) or 4-unit GE (4)
• 4-unit GE (4)

Spring (15 Units)

• BIOL 202 (5)
• CHEM 223A & B (4)
• PHYS 123 (4) or 4-unit GE (4)
• Any elective (2)

Year 3 (45-46 Units)

Fall (13-14 Units)

• BIOL 300 (5)
• GE: NSCI 306 (4)
• 4-unit GE (4) or PHYS 121 (5)

Winter (17 Units)

• BIOL 400 or BIOL 423 (5)
• 4-unit GE (4)
• 4-unit GE (4)
• 4-unit GE (4) or PHYS 122 (4)

Spring (15 Units)

• BIOL 450 or BIOL 423 (5)
• BIOL 591 (1)
• BIOL Elective (5)
• 4-unit GE (4) or PHYS 123 (4)

Year 4 (43 Units)

Fall (15 Units)
• BIOL 400 or BIOL 450 (5)
• BIOL Elective (6)
• GE Capstone* (4)

Winter (14 Units)
• BIOL Elective (6)
• BIOL Elective (4)
• GE Capstone* (4)

Spring (14 units)
• BIOL Elective (5)
• BIOL Elective (5)
• GE Capstone* (4)

General Education Requirements

A. Basic Skills (12 Units)
1. Written Communication: 4 units from ENG 104A, 104B, 106, or 107
2. Oral Communication: 4 units from COMM 120 or HON 104C
3. Mathematics: 4 units from Math 110, 115, 120, 192, or 211
4. Critical Thinking: 4 units from COMM 180, HON 104A, MATH 180, PHIL 105, PHIL 200, PSYC 105, or SOC 180

B. Natural Sciences (20 Units)
1. Math: 4 units from MATH 110, 115, 120, 192, or 211
2. Life Science: 5 units from BIOL 100, 202 or HSCI 120
3. Physical Science: A minimum of 5 units from ASTR 103; CHEM 100, 205, 215; GEOG 103; GEOL 101; PHYS 100, 121, 221
4. Special Topics in Science & Technology: 2 units from BIOL 216, 217; CHEM 105; CSCI 122, 129; GEOL 205, 210
5. **Integrative Capstone**: 4 units from NSCI 300, 310, 314, 315, 320, 325, 351, 360

**C. Humanities (20 Units)**

1. **Arts**: 4 units from ART 200, HUM 180, MUS 180, TA 260
2. **Literature**: 4 units from Eng 110, 111, 160, 170; TA 160, 212
3. **Foreign Language/Foreign Literature**: 4 units from ARAB 102, 150, 214, 290; ASL 102, 150; FLAN 102, 150; FREN 102, 150, 200, 201, 202, 290; GER 102, 150, 212, 214, 216, 290; JAPN 102, 150, 290; MAND 102, 150, 290; SPAN 102, 150, 155, 212, 213, 214, 290
4. **Philosophy**: 4 units from PHIL 190, 191, 192, 193, 194
5. **Integrative Capstone**: 4 units from HUM 319, 325, 328, 330, 335, 340, 344, 350, 370, 375, 380, 385

**D. Social and Behavioral Sciences (20 Units)**

1. **American History and Civilization**: 4 units from HIST 146, 200, 201
2. **American Institutions**: PSCI 203 (4)
3. **World Cultures**: 4 units from ANTH 140; HIST 140, 142, 144; SSCI 165
4. **Discipline Perspectives**: 4 units from ANTH 100, 102; ECON 104; ES 100; GEOG 100; PSYC 100; SOS 100; WSTD 100
5. **Integrative Capstone**: 4 units from SSCI 300, 304, 315, 316, 320, 321, 325, 345, 350

**E. Lifelong Understanding (6 Units)**

1. **The Whole Person - Physical and Physiological Issues**: KINE 205 (2)
2. **The Whole Person - Social and Psychological Issues**: 2 units from FIN 101, PHIL 101, PSYC 115, SOC 110
3. **Physical Education**: 2 units from KINE 101, 114, 120, 121, 137, 147, 149, 150

**F. Upper-division Writing Requirement (0-4 units)**

1. **Successful completion** of one from EDUC 306, ENG 306, HUM 306, MGMT 306, NSCI 306, SSCI 306
2. Passing the **Writing Requirement Exemption Exam** (WREE; 0 units)

**G. Multicultural/Gender Requirement**

1. **Integrative capstone**: HUM 325, 328, 335, 350, 370, 375, 380; NSCI 325; SSCI 316, 325, 350
2. **One upper-division course** from ANTH 325, 333; COMM 304, 401; CJUS 451; ECON 352; ENG 314; HUM 460; MUS 308, 350; PA 305; PHIL 364, 367; TA 462, 463