Biochemistry Major (14 units)

10 departmental units

a. Chemistry
   - CHEM 117 (Chemistry) W, offered every term
   - CHEM 220 (Environmental, Analytical, and Geochemistry) offered spring semesters
   - CHEM 230 (Organic Chemistry I) offered fall semesters
   - CHEM 235 (Organic Chemistry II) offered spring semesters

b. Biology
   - BIOL 110 (Human Biology), BIOL 111 (Zoology), BIOL 121 (Botany), BIOL 141 (Microbiology) or
   - BIOL 151 (Marine Biology)
   - BIOL 247 (Biometrics)
   - BIOL 289 (Genetics)

c. Biochemistry
   - BIOL/CHEM 260 (Biochemistry of Metabolism) offered spring semester,
   - BIOL/CHEM 300 (DNA & Protein Biochemistry) offered fall semester

d. Seminars and Thesis
   - CHEM 280 (Professional Tools for Scientific Careers), ¼ unit offered spring semester
   - CHEM 380 or 381 (Chemistry Seminar) ¼ unit, may be taken up to 4 times, offered every term
   - CHEM 385 (Senior Thesis), (W, Capstone ½ unit), offered every term or BIOL 385 (Biology Capstone:
     Advanced Topics) (½ unit) or BIOL 387 (Biology Capstone: Senior Manuscript) (½ unit)

e. Four supporting units:
   - MATH 110 or 115 (Calculus I or II)
   - PHYS 101 or 102 (General Physics I or II)
   - Two additional units selected from:
     - CHEM 225 (Topics in Instrumental Analysis), CHEM 240 (Thermodynamics and Kinetics), CHEM 245
       (Molecular Modeling, Visualization, and Computational Chemistry), CHEM 250 (Solid State) or
       BIOL 237 (Cell Biology), BIOL 248 (Cell and Developmental Biology), BIOL 345 (Molecular Biology),
       BIOL 357 (Human Anatomy and Physiology) or
       PHYS 102 (General Physics II), PHYS 210 (Modern Physics) or
       MATH 115 (Calculus II)

Students intent on graduate school are strongly encouraged to take CHEM 240 (Thermodynamics and Kinetics).
Students intending to attend medical school are strongly encouraged to take PHYS 102 (General Physics II) and
MATH 115 (Calculus II).

Other requirements:
Liberal arts in practice experience (research, internship, field course, or other activity plus reflection):
Capstone experience:

Expectations:
International experience:
Interdisciplinary, synthetic, connection experience (HEAL, ENVS, WGST, IDST, etc.):