## REQUIRED MAJOR COURSES (C- OR BETTER)

### BIOLOGY/MICROBIOLOGY Core Courses—All Required
- BIOB 160N/161N—Principles of Living Systems/Lab (4) - autumn, summer  
- BIOB 170N/171N—Principles of Biological Diversity/Lab (5) - spring, summer  
- BIOB 260—Cell and Molecular Biology (4) - autumn, summer  
- BIOB 272—Genetics and Evolution (4) - spring

### Microbial Ecology Major Courses—All Required
- BIOE 370—Ecology (3) - autumn  
- BIOM 360/361—General Microbiology/Lab (5) - autumn  
- BIOM 410/411—Microbial Genetics/Lab (4) - spring  
- BIOM 415—Microbial Diversity, Ecology, & Evolution (3) - spring  
- BIOM 450/451—Microbial Physiology/Lab (4) - autumn

### Biochemistry—Choose Basic or Advanced Sequence

**Basic:**  
- BCH 380—Biochemistry (4) - autumn, spring  

**Advanced:**  
- BCH 480—Adv. Biochemistry I (3) - autumn  
- BCH 482—Adv. Biochemistry II (3) - spring

### Microbial Ecology Depth—Choose 7 – 9 Credits from the Following (7 IF BCH 480-482; 9 IF BCH 380); Labs Required
- *BCH 411 Immunology/Lab (5) - autumn  
- BIO 440—Biol Electron Microscopy (2) - spring  
- *BIO 371—Ecology Lab (2) - autumn  
- *BIO 428—Freshwater Ecology (5) - spring  
- BIO 439—Stream Ecology (3) - summer (FLBS)

- BIOE 453—Lake Ecology (3) - summer (FLBS)  
- BIO 427/428—Parasitology/Lab (4) - autumn  
- BIO 435—Virology (3) - spring  
- BIO 490—Advanced Undergrad Research  
- BIOO 433/434—Plant Physiology/Lab (4) - autumn

## REQUIRED COURSES OUTSIDE OF THE MAJOR (C- OR BETTER)

### Mathematics & Physics—All Required
- M 162—Applied Calculus (4) - autumn, spring [or M 171 — Calculus I]  
- STAT 216—Intro to Statistics (4) - autumn, spring, summer  
- PHSX 205N/206N—College Physics I/Lab (5) - autumn, spring, summer [or PHSX 215N/216N]

### Chemistry—Choose Intro or Advanced Sequence

**Intro:**  
- CHMY 121N—Intro General Chemistry (3)  
- CHMY 123/124—Intro Organic/Biochem (5)  
  (both offered autumn, spring, summer)

**Advanced:**  
- CHMY 141N—College Chemistry I (5) - autumn, spring  
- CHMY 143N—College Chemistry II (5) - spring, summer  
- CHMY 221/222—Organic Chem I/Lab (5) - autumn  
- CHMY 223/224—Organic Chem II/Lab (5) - spring

### Science Electives—Choose at Least 6 Credits from the Following
- CHMY 311—Analytical Chemistry (4) - autumn  
- CSCI 135—Fund of Comp Science I (3) - autumn, spring  
- ENSC 245N—Soils (3) - autumn, spring  
- GEO 420—Hydrogeology (4) - spring  
- GEO 482—Global Change (3) - spring  
- CHMY 312/314—Analytical Chemistry II (5) - summer (FLBS)

- M 172—Calculus II (4) - autumn, spring  
- M 273—Multivariable Calculus (4) - autumn, spring  
- PHSX 207/208—College Physics II/Lab (5) [or 217/218]  
- STAT 451/457—Statistical Methods I (4) - autumn  
- STAT 452/458—Statistical Methods II (4) - spring

*Advanced College Writing Requirement met with BIOM 411 (required), and one course marked with *