

B.S. IN MICROBIOLOGY, MICROBIAL ECOLOGY

REQUIRED MAJOR COURSES (C- OR BETTER)

BIOLOGY/MICROBIOLOGY CORE COURSES—ALL REQUIRED

- _____ BIOB 160N/161N—Principles of Living Systems/Lab (3/1) - autumn, summer
- _____ BIOB 170N/171N—Principles of Biological Diversity/Lab (3/2) - spring
- _____ BIOB 260—Cell and Molecular Biology (4) - autumn, summer
- _____ BIOB 272—Genetics and Evolution (4) - spring

MICROBIAL ECOLOGY MAJOR COURSES—ALL REQUIRED

- _____ BIOE 370—General Ecology (3) - autumn
- _____ BIOM 360/361—General Microbiology/Lab (3/2) - autumn
- _____ BIOM 410/411—Microbial Genetics/Lab (3/1) - **even spring**
- _____ BIOM 415—Microbial Diversity, Ecology, & Evolution (3) - spring
- _____ BIOM 450/451—Microbial Physiology/Lab (3/1) - **odd autumn**

BIOCHEMISTRY—CHOOSE BASIC OR ADVANCED

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 OR 9 CREDITS FROM THE FOLLOWING (7 IF BCH 480-482; 9 IF BCH 380); LABS REQUIRED

- | | |
|--|--|
| BIOB 410/411—Immunology/Lab (3/2) - autumn | BIOM 420—Host-Microbe Interactions (3) - intermittent |
| BIOB 483—Phylogenetics & Evolution (3) - even autumn | BIOM 427/428—Parasitology/Lab (2/2) - autumn |
| BIOE 371—Ecology Lab (2) - autumn | BIOM 435—Virology (3) - spring |
| BIOE 400—Aquatic Microbial Ecology - summer (FLBS) | BIOM 460—Ecology of Infectious Diseases (3) - spring |
| BIOE 428—Freshwater Ecology (5) - spring | BIOM 490—Advanced Undergrad Research |
| BIOE 439—Stream Ecology (3) - summer (FLBS) | BIOO 433/434—Plant Physiology/Lab (3/1) - alternate spring |
| BIOE 453—Lake Ecology (3) - summer (FLBS) | |

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

CALCULUS—CHOOSE ONE OF THE FOLLOWING

- MI62—Applied Calculus (4) - autumn, spring, summer M171—Calculus I (4) - autumn, spring

STATISTICS & PHYSICS—ALL REQUIRED

- _____ STAT 216—Intro to Statistics (4) - autumn, spring, summer
- _____ PHSX 205N/206N—College Physics I/Lab (4/1) - autumn, spring, summer [or PHSX 215N/216N]

CHEMISTRY—CHOOSE INTRO OR ADVANCED SEQUENCE

INTRO: CHMY 121N—Intro General Chemistry (4)
CHMY 123/124—Intro Organic/Biochem (4/2)
(all offered autumn, spring)

ADVANCED: CHMY 141N/142N—Coll. Chem I/Lab (4/1) – aut, spr
CHMY 143N/144N—Coll. Chem II/Lab (4/1) – spr, sum
CHMY 221/222—Organic Chem I /Lab (3/2) - autumn
CHMY 223/224—Organic Chem II /Lab (3/2) – spring

SCIENCE ELECTIVES—CHOOSE AT LEAST 6 CREDITS FROM THE FOLLOWING

- | | |
|---|--|
| CHMY 311—Analytical Chemistry (4) - autumn | NRSM 210N—Soils, Water & Climate (3) - spring |
| CSCI 150 or 151—Comp Science (3) - autumn, spring | PHSX 207/208—Coll. Physics II/Lab (4/1) [or 217/218] |
| GEO 420—Hydrogeology (4) - spring | STAT 451/457—Statistical Methods I (4) - autumn |
| M 172—Calculus II (4) - autumn, spring, summer | STAT 452/458—Statistical Methods II (4) - spring |
| M 273—Multivariable Calculus (4) - autumn, spring | |