

## Michigan Technological University

### Minor in Biological Sciences

Program Code SBLM, Academic Year 2022-23

Department of Biological Sciences

Total Credits Required: 18

#### Required Courses: 12 to 13 credits

- BL 1400 Principles of Biology (3) and BL 1410 Principles of Biology Laboratory (1) *Prereqs: none*
- BL 2200 Genetics (3) *Prereqs: BE2400 or (BL1200 and BL1210) or (BL1400 and BL1410)*  
and BL 2210 Genetics Laboratory (1) *Prereqs: BL2200(C)*
- BL 2160 Botany (4) *Prereqs: none*  
or BL 2170 Zoology (4) *Prereqs: none*  
or BL 3210 General Microbiology (4) *Prereqs: (BL1200 and BL1210) or (BL1400 and BL1410)*

#### Elective Courses: 6 credits

- BL 3012: Essential Cell Biology (3) *Prereqs: BL 1020 or BL 1040 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410)*
- BL 3020: Biochemistry I (3) *Prereqs: (BL 1020 or BL 1040 or BE 2400) or (BL 1200 and BL 1210) or (BL 1400 and BL 1410) and (CH 2410 or CH 2420)*
- BL 3044: Advanced Human Physiology (3) *Prereqs: BL 2020*
- BL 3220: Medical Mycology and Virology (3) *Junior or higher*
- BL 3230: Medical Bacteriology (4) *Prereqs: BL 3210*
- BL 3300: Introduction to Genomics (3) *Prereqs: BL 2200 or FW 3320*
- BL 3490: Principles of Ecology and Evolution (4) *Prereqs: BL 1010 or BL 1040 or (BL 1100 and BL 1110) or (BL 1400 and BL 1410)*
- BL 3640: General Immunology (3) *Prereqs: BL 1020 or BL 1040 or BL 2020 or BE 2400 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410)*
- BL 4000: Research in Biology (1-9) *Permission of instructor required*
- BL 4020: Biochemistry II (3) *Prereqs: BL 3020*
- BL 4030: Molecular Biology (3) *Prereqs: BL 1020 or BL 1040 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410) and (BL 3020 or CH 4710)*
- BL 4038: Epigenetics (3) *Prereqs: BL 3300 or BL 4030*
- BL 4044: Human Pathophysiology (3) *Prereqs: BL 2010 and BL 2020*
- BL 4070: Environmental Toxicology (3) *Prereqs: L 1020 or (BL 1200 and BL 1210) or BL 1040 or (BL 1400 and BL 1410) and CH 1150 and CH 1160*
- BL 4090: Tropical Island Biology (2) *Permission of instructor required*
- BL 4120: Environmental Remediation (3) *Prereqs: BL 1020 or BL 1040 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410)*
- BL 4145: Plant-Microbe Interactions (3) *Prereqs: BL 2200*
- BL 4153: Applied Genome Editing (3) *Prereqs: BL 2200 or FW 3230*
- BL 4200: Microbial Physiology (3) *Prereqs: BL 3210 or BL 3310*
- BL 4300: Applied Genomics (3) *Prereqs: BL 3300*
- BL 4370: Advanced Cell Biology (3) *Prereqs: BL 2200 and CH 2420*
- BL 4380: Cardiopulmonary Physiology (3) *Prereqs: BL 2020*
- BL 4400: Microbial Ecology (3) *Prereqs: BL 3210 or BL 3310 or BL 3490*
- BL 4410: Developmental Biology (3) *Prereqs: BL 2200 and (BL 3012(C) or BL 4370(C))*
- BL 4421: Lake Superior Exploration (3) *Junior or higher*
- BL 4440: Fish Biology (4) *Prereqs: BL 1020 or BL 1040 or (BL 1200 and BL 1210) or (BL 1400 and BL 1410)*
- BL 4447: Stream Ecology (3) *Prereqs: BL 1010 or BL 1040 or (BL 1100 and BL 1110) or (BL 1400 and BL 1410)*
- BL 4450: Limnology (3) *Junior or higher*
- BL 4465: Biological Oceanography (3) *Prereqs: BL 1010 or (BL 1100 and BL 1110) or BL 1040 or (BL 1400 and BL 1410) or BL 3080*
- BL 4752: Cancer Biology (3) *Prereqs: BL 3012 or BL 4370 or BE 2400*