

## Michigan Technological University

### Minor in Pre-Health Professions

Program Code BLPH, Academic Year 2024-25

Department of Biological Sciences

Total Credits Required: 18

#### Required Courses: 9 credits

- BL 1590 First-Year Experience in Health Professions (1) *Permission of instructor required*
- BL 2010 Anatomy & Physiology I (3) *Prereqs: none*
- BL 2011 Anatomy & Physiology I (1) Lab *Prereqs: BL2010 (C)*
- BL 3006 Graduate Health Program Application Preparation (1) *Permission of instructor required*
- PSY 2000 Introduction to Psychology (3) *Prereqs: none*  
or SS 2700 Introduction to Sociology (3) *Prereqs: none*

#### Biomedical Science Elective Course: 6 credits

- 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 3025 Biochem for Health Professions (3) *Prereqs: (BL1200 or BL1400) and (CH2410 or CH2430)*
- BE 4200 Cellular and Molecular Biology II (3) *Prereqs: BE2400*
- BE 4230 Stem Cell and Tissue Engineering (3) *Prereqs: BE2400 and BE3350 and BE3800*
- BE 4330 Biomimetic Materials (3) *Prereqs: BE3350 and BE3800*
- BE 4510 Cardiovascular Engineering (3) *Prereqs: BL2020 and BE2400*
- BL 3012 Essential Cell Biology (3) *Prereqs: (BL1200 and BL1210) or (BL1400 and BL1410)*
- BL 3044 Advanced Human Physiology (3) *Prereq: BL2020*
- BL 3210 General Microbiology (3) *Prereqs: (BL1200 and BL1210) or (BL1400 and BL1410)*
- BL 3640 General immunology (3) *Prereqs: (BL1200 and BL1210) or (BL1400 and BL1410) or BL2020 or BE2400*
- BL 4020 Biochemistry II (3) *Prereqs: BL 3020*
- BL 4044 Human Pathophysiology (3) *Prereqs: BL2010 and BL2020*
- BL 4380 Cardiopulmonary Physiology (3) *Prereqs: BL2020*
- CH 3540 Biophysical Chemistry (3) *Prereqs: (BL1200 and BL1210) or (BL1400 and BL1410) and CH1122 or (CH1160 and CH1161) and MA2160 and PH2200*
- CH 4110 Pharmaceutical Chemistry: Drug Action (3) *Prereqs: BL3020 or CH4710*
- CH 4710 Biomolecular Chemistry I (3) *Prereqs: CH2420*
- KIP 3600 Motor Development (3) *Prereqs: (EH1500 or KIP1500) and BL2020*
- KIP 4100 Exercise Physiology (3) *Prereqs: BL2020 and BL2021*  
and KIP 4110 Exercise Physiology Lab (1) *Prereqs: KIP4100 (C)*
- KIP 4200 Biomechanics of Human Movement (3) *Prereqs: BL2020 and KIP 1500 and PH 1110 and PH1111*  
and KIP 4210 Biomechanics of Human Movement lab (1) *Prereqs: BL2020 and KIP 1500 and PH 1110 and PH1111*

#### Ethics, Culture, and Communication Elective: 3 credits

- BL 3970 Current Health Issues (3) *Prereqs: UN1015 and UN1025*
- HU 3015 Advanced Composition (3) *Prereqs: UN1015 and UN1025*
- HU 3261 Topics in Communicating Across Cultures (3) *Prereqs: UN1015 and UN1025*
- HU 3400 Topics in Diversity Studies (3) *Prereqs: UN1015 and UN1025*
- HU 3401 Gender and Culture (3) *Prereqs: UN1015 and UN1025*
- HU 3410 Introduction to Diversity Studies in the U.S. *Prereqs: UN1015 and UN1025*
- HU 3711 Biomedical Ethics (3) *Prereqs: UN1015 and UN1025*
- HU 3820 Interpersonal Communication (3) *Prereqs: UN1015 and UN1025*
- HU 3850 Cultural Studies (3) *Prereqs: UN1015 and UN1025*
- HU 4710 Sports Medicine and Ethics (3) *Prereqs: UN1015 and UN1025*
- PSY 3720 Social Psychology (3) *Prereqs: PSY2000 and UN1015 and UN1025*
- SS 3910 Histories and Cultures (3) *Prereqs: UN1015 and UN1025*
- SS 3961 Cross-Cultural Immersion Prep (3) *Prereqs: UN1015 and UN1025*