

Healthcare Professional Foundations

This focal area lays the groundwork for students to deliver high-quality, patient-centered care by combining strong scientific knowledge with communication, collaboration, and social awareness. It may be of interest if you are considering further education in healthcare professions such as:

- Medicine
- Nursing
- Pharmacy
- Dentistry

Please note:

- **Inclusion on this list does not guarantee enrolment in courses that have Priority Access or other restrictions in place**
- This guidance document provides an optional framework for tailoring your electives to your career interests and professional goals
- You are responsible for selecting courses that meet degree requirements for the BIOS major
- This document highlights common required prerequisites for healthcare professional programs; however, you are responsible for verifying admission requirements for any further education programs you're considering

Key Skills and Areas of Knowledge

A) Science Foundations

Consider choosing science electives from each of the following areas:

Anatomy and Physiology

ZOO*2090 Vertebrate Structure & Function
BIOM*3010 Biomedical Comparative Anatomy
BIOM*3040 Medical Embryology
HK*3810 Human Physiology II
BIOM*4110 Mammalian Reproductive Biology

Chemistry, Molecular and Cellular Biology


CHEM*2720 Organic Chemistry I
MCB*2050 Molecular Biology of the Cell
MICR*2420 Introduction to Microbiology
BIOC*3560 Structure & Function in Biochemistry

Human Health, Disease, and Nutrition

MICR*3230 Immunology
NUTR*3210 Fundamentals of Nutrition
PATH*3610 Principles of Disease
BIOM*4050 Biomedical Aspects of Aging
HK*4230 Advanced Study in Human Health and Nutritional Sciences

B) Transferable Skills and Professional Competencies

Develop transferable skills and professional values by selecting courses from some of the following areas.

- The BSc program and BIOS major include a limit on the number of 1000 level and non-science credits that can count toward the degree. See the [Academic Calendar](#) listing for full details
- DNA symbol () marks approved science electives. These courses may not be counted toward the Liberal Education degree requirement


Social Perspectives on Health and Human Development

Integrating biological, cultural, and social perspectives on health. Credit(s) in Psychology may be required for admission into some healthcare professional programs.

CREA*1000 Introduction to Creative Arts, Health and Wellness
 FRHD*1010 Human Development
 PSYC*1000 Introduction to Psychology
 MCB*2000 Microbes, Medicines & Society


Ethics, Equity, and Critical Thinking

Navigating and addressing complex moral, ethical, and social issues in healthcare. Credit(s) in Ethics and/or Indigenous Studies may be required for admission into some healthcare professional programs.

PHIL*2120 Ethics
 PHIL*2030 Philosophy of Medicine
 UNIV*2010 Anti-Discrimination & Anti-Oppression
 BIOM*3210 Critical Thinking in the Health Sciences 



Leadership and Communication

Developing skills for leadership; communicating information clearly and persuasively. Credit(s) in English may be required for admission into some healthcare professional programs.

ENGL*1030 Effective Writing
 SPMT*1020 Sport Management Today
 HROB*2010 Foundations of Leadership
 HK*4510/11/12 Teaching, Learning, and Knowledge Transfer 

Collaborative Problem-Solving and Community Engagement

Integrating diverse perspectives and expertise; working with others toward a common goal

ONEH*1000 Introduction to One Health 
 BIOL*3660 Internship in Biological Science 
 UNIV*3000 Civic Engagement & Service Learning
 BIOL*4020 Integrative Problems in Biological Science 