INTERDISCIPLINARY LIFE SCIENCES MINOR (B.SC.) (24 CREDITS)

Offered by: Science (Faculty of Science)
Degree: Bachelor of Science; Bachelor of Arts and Science
Program credit weight: 24

Program Description

The Interdisciplinary Life Sciences Minor will allow students from the earth, physical, math, and computational science areas to broaden their studies with some basic life sciences, health social science, and empirical technological science. The Minor is 24 credits and allows students flexibility in their course selections. Students must take 9 credits from an extensive list of basic life science courses, 3 credits from an extensive list of health and social science courses, and 3 credits from an empirical and technological science list. The remaining 9 credits may be taken from courses listed in any of the three categories.

Please note: Students studying in Anatomy and Cell Biology; Biochemistry; Honours Immunology; Microbiology and Immunology; Neuroscience; Pharmacology; and Physiology are not permitted to complete this Minor.

Interested students should contact the Interdisciplinary Programs Adviser.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Complementary Courses (24 credits)

The 24 credits required for this program must satisfy the following criteria:

At least 18 credits must be outside the student's main discipline.

Depth requirement:

at least 6 credits must be at the 300 level or above.

Breadth requirement:

at least 9 credits must be taken from the Basic Life Sciences List,

at least 3 credits from the Health Social Sciences List,

at least 3 credits from the Empirical Science and Technology List.

The remaining 9 credits may be selected from any of the lists.

Basic Life Sciences

At least 9 credits from:

Expand allContract all

Course	Title	Credits
ANAT 212	Molecular Mechanisms of Cell Function.[1]	3
ANAT 214	Systemic Human Anatomy.	3
ANAT 261	Introduction to Dynamic Histology.	4
ANAT 262	Introductory Molecular and Cell Biology.	3
ANAT 321	Circuitry of the Human Brain.	3
ANAT 365	Cellular Trafficking.	3
ANAT 381	Experimental Embryology.	3
BIOC 212	Molecular Mechanisms of Cell Function.[1]	3
BIOC 311	Metabolic Biochemistry.	3
BIOC 450	Protein Structure and Function.	3
BIOC 458	Membranes and Cellular Signaling.	3
BIOL 200	Molecular Biology.	3
BIOL 201	Cell Biology and Metabolism.	3
BIOL 202	Basic Genetics.	3
BIOL 300	Molecular Biology of the Gene.	3
BIOL 301	Cell and Molecular Laboratory.	4
BIOL 303	Developmental Biology.	3
BIOL 306	Neural Basis of Behaviour.	3
BIOL 314	Molecular Biology of Cancer.	3
BIOL 320	Evolution of Brain and Behaviour.	3
CHEM 212	Introductory Organic Chemistry 1.	4
CHEM 222	Introductory Organic Chemistry 2.	4
CHEM 302	Introductory Organic Chemistry 3.	3
CHEM 502	Advanced Bio-Organic Chemistry.	3
CHEM 503	Drug Discovery.	3
EXMD 401	Physiology and Biochemistry Endocrine Systems.	3
MIMM 211	Introductory Microbiology.	3
MIMM 214	Introductory Immunology: Elements of Immunity.	3
MIMM 314	Intermediate Immunology.	3
MIMM 323	Microbial Physiology.	3
MIMM 324	Fundamental Virology.	3
MIMM 387	The Business of Science.	3
MIMM 465	Bacterial Pathogenesis.	3
MIMM 466	Viral Pathogenesis.	3
NSCI 201	Introduction to Neuroscience 2.	3
NUTR 307	Metabolism and Human Nutrition.	3
PATH 300	Human Disease.	3
PHAR 300	Drug Action.	3
PHAR 301	Drugs and Disease.	3
PHAR 303	Principles of Toxicology.	3
PHAR 503	Drug Discovery and Development 1.	3
PHAR 504	Drug Discovery and Development 2.	3
PHGY 209	Mammalian Physiology 1.	3
PHGY 210	Mammalian Physiology 2.	3

PHGY 311	Channels, Synapses and Hormones.	3
PHGY 312	Respiratory, Renal, and Cardiovascular Physiology.	3
PHGY 313	Blood, Gastrointestinal, and Immune Systems Physiology.	3
PHGY 314	Integrative Neuroscience.	3
PSYC 211	Introductory Behavioural Neuroscience.	3
PSYC 311	Human Cognition and the Brain.	3
PSYC 317	Genes and Behaviour.	3
PSYC 318	Behavioural Neuroscience 2.	3
PSYC 342	Hormones and Behaviour.	3

[1] Students take either ANAT 212 Molecular Mechanisms of Cell Function. or BIOC 212 Molecular Mechanisms of Cell Function., but not both.

Health Social Science

At least 3 credits from:

Expand allContract all

Course	Title	Credits
ANTH 204	Anthropology of Meaning.	3
ANTH 227	Medical Anthropology.	3
ANTH 302	New Horizons in Medical Anthropology.	3
ANTH 314	Psychological Anthropology 01.	3
ECON 440	Health Economics.	3
GEOG 221	Environment and Health.	3
GEOG 303	Health Geography.	3
HIST 249	Health and the Healer in Western History.	3
HIST 335	Science and Medicine in Canada.	3
HIST 350	Science and the Enlightenment.	3
HIST 381	Colonial Africa.	3
HIST 424	Gender, Sexuality and Medicine.	3
HSEL 308	Issues in Women's Health.	3
HSEL 309	Women's Reproductive Health.	3
PHIL 237	Contemporary Moral Issues.	3
PHIL 343	Biomedical Ethics.	3
POLI 417	Health Care in Canada.	3
PSYC 215	Social Psychology.	3
PSYC 304	Child Development.	3
PSYC 333	Personality and Social Psychology.	3
PSYC 412	Child Development: Psychopathology .	3
PSYC 413	Cognitive Development.	3
PSYC 414	Social Development.	3
SOCI 225	Medicine and Health in Modern Society.	3
SOCI 309	Health and Illness.	3
SOCI 310	Sociology of Mental Health.	3
SOCI 365	Health and Development.	3
SOCI 390	Gender and Health.	3
SOCI 515	Medicine and Society.	3
SOCI 525	Health Care Systems in Comparative Perspective.	3
SOCI 538	Selected Topics in Sociology of Biomedical Knowledge.	3

Empirical Science and Technology

At least 3 credits from:

Credit given for statistics courses is subject to certain restrictions. Students should consult the "Course Overlap" information in the "Course Requirements" section for the Faculty of Science.

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Course	Title	Credits
BIOL 309	Mathematical Models in Biology.	3
BIOL 373	Biometry.	3
COMP 202	Foundations of Programming.	3
COMP 364	Computer Tools for Life Sciences.	3
COMP 462	Computational Biology Methods.	3
GEOG 202	Statistics and Spatial Analysis.	3
MATH 203	Principles of Statistics 1.	3
MATH 204	Principles of Statistics 2.	3
MATH 323	Probability.	3
MATH 324	Statistics.[1]	3
PSYC 204	Introduction to Psychological Statistics.	3
PSYC 305	Statistics for Experimental Design.	3

[1] Students who have already received credit for MATH 324 Statistics. will NOT receive credit for GEOG 202 Statistics and Spatial Analysis., MATH 203 Principles of Statistics 1., PSYC 204 Introduction to Psychological Statistics., BIOL 373 Biometry., MATH 204 Principles of Statistics 2., or PSYC 305 Statistics for Experimental Design..