CELL BIOLOGY (THESIS) (M.SC.) (45 CREDITS)

Offered by: Anatomy and Cell Biology (Faculty of Medicine and Health Sciences)
Degree: Master of Science
Program credit weight: 45

Program Description

The M.Sc. in Cell Biology focuses on the study of the assembly, structure and functional dynamics of macromolecular protein complexes. The research topics range from the understanding of the mechanisms of bacterial antimicrobial resistance to unveiling the mechanisms of cell division, transport and sorting of proteins, structure and function of extracellular matrices, and the mechanisms of cancer and aging. Training includes the application of cutting-edge technologies to molecular and cell biology, based on hypothesis-driven research.

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.

Thesis Course (24 credits)

Expand allContract all

Course	Title	Credits
ANAT 698	M.Sc. Thesis Research 1.	24

Required Course (12 credits)

Expand allContract all

Course	Title	Credits
ANAT 601	MSc Seminar Examination.	3
ANAT 695	Seminars in Cell Biology 1.	3
ANAT 696	Seminars in Cell Biology 2.	3
ANAT 697	Seminars in Cell Biology 3.	3

Complementary Courses (9 credits)

6 credits from one of two streams: Cell Developmental Biology Stream or Human Systems Biology Stream

Cell Developmental Biology Stream

Expand allContract all

Course	Title	Credits
ANAT 690D1	Cell and Developmental Biology.	3
ANAT 690D2	Cell and Developmental Biology.	3

Human Systems Biology Stream

** This stream is currently under review. **

6 credits required:

Expand allContract all

Course	Title	Credits
ANAT 690D1	Cell and Developmental Biology.	3
ANAT 690D2	Cell and Developmental Biology.	3

3 credits selected from:

Expand allContract all

Course	Title	Credits
BMDE 502	BME Modelling and Identification.	3
BMDE 519	Biomedical Signals and Systems.	3
BTEC 501	Bioinformatics.	3
COMP 564	Advanced Computational Biology Methods and Research.	3
COMP 680	Mining Biological Sequences.	4
EXMD 602	Techniques in Molecular Genetics.	3
MIMM 613	Current Topics 1.	3
MIMM 614	Current Topics 2.	3
MIMM 615	Current Topics 3.	3
NEUR 502	Basic and Clinical Aspects of Neuroimmunology.	3

Upon consultation with the supervisor, students may select a 3-credit course outside of this list from Biomedical Science courses at the 500-600 level.