PHYSIOLOGY HONOURS (B.SC.) (75 CREDITS)

Offered by: Physiology (Faculty of Science)
Degree: Bachelor of Science
Program credit weight: 75

Program Description

All admissions to the Honours program will be in U2, and the student must have a U1 GPA of 3.30, with no less than a B in PHGY 209 Mammalian Physiology 1. and PHGY 210 Mammalian Physiology 2.. Admission to U3 requires a U2 CGPA of 3.20 with no less than a B in U2 Physiology courses. Decisions for admission to U3 will be heavily influenced by student standing in U2 courses.

The Department reserves the right to restrict the number of entering students in the Honours program. Students who do not maintain Honours standing may transfer their registration to the Major program in Physiology.

The deadline to apply to the Honours program is August 23, 2019. Application forms are available online at physiology.med@mcgill.ca or a hard copy can be picked up at McIntyre 1021. Please contact Sonia Viselli, Student Affairs Officer (sonia.viselli@mcgill.ca; 514-398-3689) for more information. An email will be sent to acknowledge receipt of your application.

Graduation: To graduate from the Honours Physiology program, the student will have a CGPA of 3.20 with a mark no less than a B in all Physiology courses.

If not previously taken, CHEM 212 Introductory Organic Chemistry 1. must be completed in addition to the 75 program credits.

Degree Requirements — B.Sc.

This program is offered as part of a Bachelor of Science (B.Sc.) degree.

To graduate, students must satisfy both their program requirements and their degree requirements.

- The program requirements (i.e., the specific courses that make up this program) are listed under the Course Tab (above).
- The degree requirements—including the mandatory Foundation program, appropriate degree structure, and any additional components—are outlined on the Degree Requirements page.

Students are responsible for ensuring that this program fits within the overall structure of their degree and that all degree requirements are met. Consult the Degree Planning Guide on the SOUSA website for additional guidance.

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.

Required Courses (60 credits)

Expand allContract all

Course	Title	Credits
ANAT 261	Introduction to Dynamic Histology.	4
BIOC 311	Metabolic Biochemistry.	3
BIOL 200	Molecular Biology.	3
BIOL 202	Basic Genetics.	3
BIOL 301	Cell and Molecular Laboratory.	4
CHEM 222	Introductory Organic Chemistry 2.	4
PHGY 209	Mammalian Physiology 1.	3
PHGY 210	Mammalian Physiology 2.	3
PHGY 212	Introductory Physiology Laboratory 1.	1
PHGY 213	Introductory Physiology Laboratory 2.	1
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
PHGY 351	Research Techniques: Physiology.	3
PHGY 359D1	Tutorial in Physiology.	0.5
PHGY 359D2	Tutorial in Physiology.	0.5
PHGY 459D1	Physiology Seminar.	3
PHGY 459D2	Physiology Seminar.	3
PHGY 461D1	Experimental Physiology.	4.5
PHGY 461D2	Experimental Physiology.	4.5

Complementary Courses (15 credits)

9 credits selected as follows:

3 credits, one of:

Expand allContract all

Course	Title	Credits
BIOC 212	Molecular Mechanisms of Cell Function.	3
BIOL 201	Cell Biology and Metabolism.	3

3 credits, one of:

Expand allContract all

Course	Title	Credits
BIOL 309	Mathematical Models in Biology.	3
BIOL 373	Biometry.	3
COMP 204	Computer Programming for Life Sciences.	3
COMP 250	Introduction to Computer Science.	3
PSYC 305	Statistics for Experimental Design.	3

3 credits, one of:

Expand allContract all

Course	Title	Credits
BIOC 312	Biochemistry of Macromolecules.	3
CHEM 203	Survey of Physical Chemistry.	3
CHEM 204	Physical Chemistry/Biological Sciences 1.	3

6 credits selected from the Upper-Level Physiology (ULP) course list as follows:

Expand allContract all

Course	Title	Credits
BIOL 532	Developmental Neurobiology Seminar.	3
BMDE 519	Biomedical Signals and Systems.	3
EXMD 502	Advanced Endocrinology 1.	3
EXMD 503	Advanced Endocrinology 02.	3
EXMD 506	Advanced Applied Cardiovascular Physiology.	3
EXMD 507	Advanced Applied Respiratory Physiology.	3
EXMD 508	Advanced Topics in Respiration.	3
MIMM 414	Advanced Immunology.	3
MIMM 509	Inflammatory Processes.	3
PHGY 425	Analyzing Physiological Systems.	3
PHGY 451	Advanced Neurophysiology.	3
PHGY 488	Stem Cell Biology.	3
PHGY 502	Exercise Physiology.	3
PHGY 513	Translational Immunology.	3
PHGY 515	Blood-Brain Barrier in Health and Disease.	3
PHGY 516	Physiology of Blood .	3
PHGY 518	Artificial Cells.	3
PHGY 524	Chronobiology.	3
PHGY 525	Cortical Plasticity.	3
PHGY 531	Topics in Applied Immunology.	3
PHGY 550	Molecular Physiology of Bone.	3
PHGY 556	Topics in Systems Neuroscience.	3
PHGY 560	Light Microscopy-Life Science.	3
PSYC 470	Memory and Brain.	3
PSYT 500	Advances: Neurobiology of Mental Disorders.	3