

# MAMMALIAN PHYSIOLOGY 2: PHGY 210

Winter 2023

**Section 001:** *Scheduled M, W & F: 8:35 to 9:25 AM – But only recorded lectures available*

**Section 002:** Monday, Wednesday & Friday: 12:35 to 1:25 PM – LEA 132

**Course Coordinator:** Dr. M. Vollrath, [melissa.vollrath@mcgill.ca](mailto:melissa.vollrath@mcgill.ca)

Monday	Wednesday	Friday	TOPIC	LECTURER
		January 5	Introduction	Dr. Vollrath 1 lecture
8	10	12	Respiration	Dr. Lauzon 7 lectures
15	17	19		
22 LearnSmart Assignment Due Section Quiz opens				
	24	26	Cardiovascular	Dr. Montezano 10 lectures
29	31	February 2		
5	7	9		
12	14 LS Assignment Due Section Quiz opens			
		16	Endocrinology	Dr. White 5 lectures
19	21	23		
26 LS Assignment Due Section Quiz opens				
	28	March 1	Digestion	Dr. Vollrath 8 lectures
<b>McGill Reading Week – No Classes March 4 to March 8</b>				
11 No Class, Midterm Prep	13	15		
18	20	22		
25 LS Assignment Due Section Quiz opens			Renal	Dr. Takano 6 lectures
	27	29 Good Friday – No Class		
April 1 Easter Monday - No Class	3	5		
8	10	12 LS Assignment Due Section Quiz opens		

**Important Dates:**

- January 5, 2024 – First Day of Classes
- March 4 to 8, 2024 – STUDY BREAK
- April 12 – Last Day of Classes

**Midterm Exam:** Tuesday, March 12, 7–8:30 PM Location, to be announced  
**Material:** Respiration, Cardiovascular and Endocrinology

**Final Exam:** Held during the final exam period in April  
 Time and date determined by the Faculty of Science  
**Material:** Cumulative, but with emphasis on Renal and Digestion

**Mark Distribution:** Midterm: 30%, Final 55%, LearnSmart 5%, Online Quizzes 10%

**Exam Policies:** End-of-section quizzes will be delivered online (via Connect) and timed: 2 hours allowed. You are expected to work independently, but use of notes is allowed. Midterm and final exams will be delivered in person and are closed-note, closed-book exams.

**Note 1:** McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information).

**Note 2** In accordance with McGill University Exam Policy, it is not possible to re-write an exam once it has been written. If you are unwell on the day of the exam, be sure to get the appropriate documentation for an exam deferral. <https://www.mcgill.ca/exams/dates/supdefer>

**Note 3:** In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

**Note 4:** © Instructor generated course materials (e.g., slides, summaries, quiz and exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

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### **General Information:**

Physiology is the study of normal functional activities in the living organism. These activities may be examined at the molecular, cellular, organ, organ-system, and organismal levels; the Department's introductory courses will expose the student to the various aspects of the discipline.

The two courses, PHGY 209 (3 credits) and PHGY 210 (3 credits), constitute a single course, designed as an introduction to Mammalian Physiology for students registered in the Faculty of Science. The normal sequence is 209 (in the Fall) followed by 210 (in the Winter); it is permissible, but more challenging, to take them in the reverse order.

Physiology 209 and 210 are required courses for all Physiology Programs and are prerequisites for all other courses offered by the Department. They are also required or complementary courses for students registered in other biomedically-related departments in the Faculty of Science (Biology, Cell Biology and Anatomical Sciences, Biochemistry, Microbiology and Immunology, Pharmacology and Therapeutics, Psychology), as well as the professional programs in Physical and Occupational Therapy and for Kinesiology in the Faculty of Education.

The prerequisites are college (or CEGEP) courses in Biology, Chemistry, and Physics, with Organic Chemistry (CHEM 212 and CHEM 222, or equivalents) as pre-or co-requisites.

Physiology students are also required to take the laboratory courses PHGY 212 and PHGY 213; it is recommended that these be taken concurrently with PHGY 209 and 210.

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### **Course Evaluation:**

**Readings:** Assigned readings for each section may be found on Connect. The link is available via the *myCourses* page. Each reading assignment has associated LearnSmart questions that will count for 5% of the total course grade and which must be completed by 5 PM on the last day of each section. No sick notes or extensions will be given for these assignments. The lowest mark will be dropped.

*Example:* Respiration readings/homework must be completed by 5 PM on Monday, January 22.

**Quizzes:** Online quizzes for each section of the course will be accessible on *myCourses* via Connect. These quizzes will count for 10% of the total course grade. **Quizzes will be available starting at 5 PM on the date of the last lecture of each section and are open for 5 days**. Quizzes are timed and you will have 2 consecutive hours to complete it once you open it. *Example:* Quiz 1 (Endocrinology) will be available from 5 PM on January 22 until 5 PM on Jan. 27. No sick notes will be accepted, or extensions offered for quiz non-completion. The lowest mark will be dropped. Note: You are expected to work independently on the quizzes but can use your notes.

**Midterm Exam:** The midterm will be held in person, location to be announced **Tuesday, March 12, 2024, at 7–8:30 PM**. The exam will consist of 35 multiple-choice questions. Topics included: Respiration, Cardiovascular and Endocrinology. The midterm counts for 30% of the total course grade.

Students, who for serious reasons (e.g., illness or family affliction) cannot write the **MIDTERM EXAM**, are required to submit supporting documentation to the **Physiology General Office** within **ONE WEEK (by**

**Tuesday, March 19 at 5:00 PM**) of the midterm exam. The note must clearly indicate the reason for being unable to write the midterm exam on **its scheduled date**. Following submission of a valid note, students will have the option to write a “**Deferred**” midterm on Wednesday March 27, 7–8:30 PM. *Only students who have a documented reason for not being able to take the deferred midterm can shift the weight to their final exam.* If no acceptable documentation is provided by the deadline indicated above, the midterm exam will be graded as a zero.

**Final Exam:** The final will be held during the final exam period, at a date determined by the McGill exams office. The exam will be held in person, location to be announced. You will have 3 hours to complete the exam. The final exam will be **cumulative** with emphasis on Digestion and Renal. The exam will consist of 70 multiple-choice questions. The final counts for 55% of the total course grade.

**Format:** All quizzes and exams will consist of **multiple-choice questions**. There will be 35 questions on the midterm exam and 70 questions on the final exam.

**Supplemental/Deferred Final Exams: 85%/55%**

In the case of a supplemental final exam, the additional 15% will come from the LearnSmart assignments and end-of-section quizzes. In the case of a deferred exam, the additional 45% of the grade will come from the LearnSmart assignments (5%), end-of-sections quizzes (10%) and midterm (30%). These exams are held in August and are organized by the Faculty of Science:

<https://www.mcgill.ca/science/student/general/exams> See: <https://www.mcgill.ca/exams/dates/supdefer>

**Grading:**

The department of Physiology will **NOT** revise/upgrade marks except on sound academic grounds. Once computed, the marks in this course will **NOT** be altered/increased arbitrarily. Decimal points will be “rounded” as follows: for a final aggregate mark of 79.5%, the mark will be reported as 80% (A-); a final aggregate mark of 79.4% will be reported as 79% (B+). These marks are **FINAL and NON-NEGOTIABLE**. *Also note:* Once an exam is written, the grade is fixed, and the exam weight cannot be changed. **If you are unwell on an exam day and cannot perform at your best, obtain a medical note and defer your exam.**

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**Tutorial Sessions:**

Course lecturers will hold tutorial sessions according to the attached schedule. Verify *myCourses* for possible revisions.

LECTURER	TOPIC	DAY	DATE	TIME	LOCATION
Dr. Lauzon	Respiration Cardiovascular	Wed	January 31	6 - 7 PM	McMed 504
Dr. Montezano	Cardiovascular	Wed	February 21	6 - 7 PM	McMed 504
Dr. White	Endocrinology	Mon	February 28	6 - 7 PM	McMed 504
Dr. Vollrath	Digestion	Wed	April 3	6 - 7 PM	McMed 504
Dr. Takano	Renal	Friday	April 12	5:30 – 6:30 PM	via Zoom

No new material will be introduced during the tutorials; these sessions are intended for clarification and reinforcement of the subject matter covered in class.

When studying, make a habit to write down points that you do not fully understand. Come to the tutorial prepared to ask questions. Students studying in English for the first time are especially encouraged to attend.

**Course Management:**

PHGY 210 is a *myCourses* managed course. All course information and announcements will be posted at <http://www.mcgill.ca/mycourses>. Please visit the site often (requires McGill username and password) to check for updates. Information such as grades will also be retrievable in a confidential fashion at this site.

**Learning Aids:**

Lecture Slides: The visual materials presented in class will be available on *myCourses*.

Lecture and Tutorial Recordings: available on *myCourses*.

Undergraduate Student Course Assistants: (USCAs) Peer undergraduate student course assistants consisting of knowledgeable senior students will be available to help facilitate learning. They will monitor the discussion forum on *myCourses*, respond to student emails and attend zoon lectures where they may answer questions in the chat. A list of USCAs and their email addresses can be found on *myCourses*.

Discussion Board: A discussion board for each section of the course, organized by section topic, can be found on *myCourses*. This is a site for peer interaction. You may post questions and discussion class material here. The board is monitored by the USCAs.

Course Lecturers: You are welcome to contact professors for individual meetings: e-mail the lecturer to make an in-person or Zoom appointment.

Course Secretary: The course secretary is your first point of contact for questions related to course logistics. Example questions include accessing course materials on *myCourses*, lecture recordings, questions about the course syllabus, exam deferrals and Connect.

**Lecturers**

- Dr. Anne Marie Lauzon
- Dr. Augusto Montezano
- Dr. John White
- Dr. Melissa Vollrath
- Dr. Tomoko Takano

**E-mail Addresses**

- [anne-marie.lauzon@mcgill.ca](mailto:anne-marie.lauzon@mcgill.ca)
- [augusto.montezan@muhc.mcgill.ca](mailto:augusto.montezan@muhc.mcgill.ca)
- [john.white@mcgill.ca](mailto:john.white@mcgill.ca)
- [melissa.vollrath@mcgill.ca](mailto:melissa.vollrath@mcgill.ca)
- [tomoko.takano@mcgill.ca](mailto:tomoko.takano@mcgill.ca)

**Course Administrator**

Mr. Alex Piciacchia

[undergrad1.physiology@mcgill.ca](mailto:undergrad1.physiology@mcgill.ca)

**Textbook:**

Students are responsible for the assigned readings in the course textbook: ***Vander’s Human Physiology – The Mechanisms of Body Function***, eds. Widmaier, Raff, and Strang, 16th edition (2021). Each reading is associated with a LearnSmart assignment worth 5% of the total course grade. LearnSmart assignments must be completed by 5 PM on the last day of each section.

Connect/LearnSmart is accessed from the *myCourses* page. This is an electronic subscription service and the cost is \$80/year. A 3-ring binder-ready version of the textbook can be purchased along with the Connect electronic access code for an additional \$30 plus shipping and handling.

LECTURER	TOPIC	READINGS
Dr. A.M. Lauzon	Respiration	Chapter 13 – Respiratory Physiology
Dr. A. Montezano	Cardiovascular	Chapter 12 – Cardiovascular
Dr. J. White	Endocrinology	Chapter 11 – The Endocrine System Chapter 17 – Reproduction (except gonadal development) Chapter 5 – Control of Cells by Chemical Messengers
Dr. M. Vollrath	Digestion	Chapter 15 – The Digestion and Absorption of Food
Dr. T. Takano	Renal	Chapter 14 – The Kidneys and Regulation of Water and Inorganic Ions