Fall 2020

Section 001: Monday, Wednesday, and Friday from 9:35 a.m. -10:25 a.m. EST* **Section 002**: Monday, Wednesday and Friday from 12:35 p.m. - 1:25 p.m. EST*

Course Coordinators

Drs. Melissa Vollrath, Ann Wechsler and Alvin Shrier

Monday	Wednesday	Friday	TOPIC	LECTURER
7 Labor Day No Class	September 2 Live Lecture 9 Pre-Recorded plus Live Tutorial	Pre-Recorded	Introduction, Homeostasis & Body Fluids	Dr. Vollrath 3 lectures
14 Pre-Recorded plus Live Tutorial		Pre-Recorded	Transport Mechanisms	Dr. Shrier 2 lectures
Pre-Recorded 21	Pre-Recorded 23 Pre-Recorded	Pre-Recorded 25 Pre-Recorded plus Live Tutorial	Blood	Dr. Wechsler 5 lectures
Yom Kippur No Class 5 Pre-Recorded	Pre-Recorded 7 Pre-Recorded	October 2 Pre-Recorded 9 Pre-Recorded plus Live Tutorial	Immunology	Dr. Vollrath 5 lectures
Thanksgiving No Class 19 Pre-Recorded 26 Pre-Recorded plus Live Tutorial	Pre-Recorded 21 Pre-Recorded	Pre-Recorded 23 Pre-Recorded	Nerve/Synapse	Dr. Ragsdale 6 lectures
November 2 Pre-Recorded 9 Pre-Recorded plus Live Tutorial 16 Pre-Recorded	Pre-Recorded Pre-Recorded 11 Pre-Recorded 18 Pre-Recorded	Pre-Recorded Pre-Recorded 13 Pre-Recorded 20 Pre-Recorded plus Live Tutorial	CNS/Sensory and Cognitive/Motor	Dr. Cook 6 + 5 lectures
Pre-Recorded Pre-Recorded Pre-Recorded	Pre-Recorded December 2 Pre-Recorded plus Live Tutorial	Pre-Recorded 27	Muscle/Autonomic Nervous System	Dr. Ragsdale 5 lectures

^{*} For 2020, PHGY 209 lectures are scheduled on Mon., Wed., and Fri: Section 001 from 9:35 to 10:25 a.m., Section 002 from 12:35 to 1:25 p.m. **However, ALL lectures, except the first lecture on**

Wednesday, Sept. 2 will be pre-recorded for students to view at a time that is convenient. Live tutorial sessions will also be held during class time at the end of each section, as per the schedule above. These Live sessions will be held via Zoom at 9:35 a.m. for section 1 and 12:35 p.m. for section 2. The Zoom links will be available on myCourses.

Midterm Exam 1: Monday, October 5, 2020

Material: Body Fluids, Transport Mechanisms, Blood

Midterm Exam 2: Monday, November 2, 2020

Material: Immunology, Nerve/Synapse

Final Exam: Held during the final exam period in December. Time and date determined by the

Faculty of Science.

Material: Cumulative, but with emphasis on CNS- Sensory/Motor and CNS - Cognitive

and Muscle/ANS

Mark Distribution: Midterm 1: 22%, Midterm 2: 22%, Final 45% LearnSmart 4% Online Quizzes 7%

<u>Note 1:</u> 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/ for more information).

<u>Note 2:</u> In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

<u>Note 3:</u> © Instructor generated course materials (e.g., recorded lectures, handouts, notes, summaries, 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.

PHGY 209 - MAMMALIAN PHYSIOLOGY 1

Required Textbook Readings and LearnSmart Assignments:

Vander's Human Physiology: The Mechanisms of Body Function, 15th edition (2019)

LECTURER	TOPIC LearnSmart Due Date	Vander's 15 th Edition	
Dr. Vollrath	Body Fluids Sept. 9, 9 a.m. EST	Sections 1.1-1.4; Section 2.3; Section 14.6	
Dr. Shrier	Transport Mechanisms Sept. 14, 9 a.m. EST	Sections 4.1-4.4; Section 3.2; Section 12.10	
Dr. Wechsler	Blood Sept. 25, 9 a.m. EST	Sections 12.1, 12.10, 12.12, 12.23-12.26	
Dr. Vollrath	Immunology Oct. 9, 9 a.m. EST	Sections 18.1-18.6	
Dr. Ragsdale	Nerve/Synapse Oct. 26, 9 a.m. EST	Sections 6.1-6.3 and 6.8-6.9 and 6.12-6.13	
Dr. Cook	CNS/Sensory Nov. 9, 9 a.m. EST	Sections 6.15-6.17 and 6.19; 7.1-7.9	
Dr. Cook	Cognitive/Motor Nov. 20, 9 a.m. EST	Sections 8.1-8.3 and 8.5 and 10.1-10.4	
Dr. Ragsdale	Muscle & Autonomic Nervous System <i>Dec.</i> 2, 9 a.m. EST	Sections 9.1, 9.4, 9.7-9.9 and Section 6.18	

PHGY 209 - MAMMALIAN PHYSIOLOGY 1

Instructor-Led Exam-Review Tutorials

LECTURERS and TOPICS	DATE	TIME
Drs. Vollrath & Shrier Body Fluids and Transport Mechanisms	Thursday, Sept. 24	5:30 – 6:30 p.m.
Dr. Wechsler Blood	Thursday, October 1	5:30 – 6:30 p.m.
Dr. Vollrath Immunology	Thursday, Oct. 22	5:30 – 6:30 p.m.
Dr. Ragsdale Nerve/Synapse	Thursday, Oct. 29	5:30 – 6:30 p.m.
Dr. Cook CNS Sensory/Motor/Cognitive	Thursday, Nov. 26	5:30 – 7:00 p.m.
Dr. Ragsdale Muscle/Autonomic Nervous System	Thursday, Dec. 3	5:30 – 6:30 p.m.

Please note that no new material will be introduced during the tutorials; these sessions are intended for clarification and reinforcement of the subject matter covered in the lectures and readings. The tutorial sections are open to both Section 1 and Section 2 students.

When you are studying, make it a habit to write down difficult points that you do not fully understand. Come to the tutorial prepared to ask questions and to discuss the answers with the individual professors. Students studying in English for the first time are especially encouraged to attend these tutorial sessions.

PHGY 209 - MAMMALIAN PHYSIOLOGY 1

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. The normal sequence is 209 (held in the Fall) followed by 210 (held 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 courses offered by the Department. They are also required or complementary courses for students registered in other biomedical-science 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 Therapy, 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 and Pharmacology students are also required to take the laboratory courses PHGY 212 and 213; it is recommended that these be taken concurrently with PHGY 209 and 210, respectively.

Schedule

For fall 2020, PHGY 209 lectures are scheduled on Mondays, Wednesdays, and Fridays: Section 001 lectures from 9:35 to 10:25 am, Section 002 from 12:35 to 1:25 pm. **NOTE THAT ALL lectures, except the first lecture will be pre-recorded and available on** *my***Courses** for students to view at a time that is convenient for them. Live tutorial sessions will also be held live during class time for each section as per the schedule,

above. It is essential that students follow the schedule and keep up with the reading and lecture material. Live sessions will be held via Zoom at 9:35 a.m. for section 1 and 12:35 p.m. for section 2. Live sessions will be recorded and posted on *my*Courses.

Text Book

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,15th edition (2019). Each reading is associated with a short LearnSmart assignment worth 4% of the total course grade. <u>LearnSmart assignments must be completed by 9 am on the last day of each section.</u> Connect/LearnSmart is accessed from the *my*Courses page. This is an electronic subscription service and the cost is \$80. The text book will also be used for PHGY210 and PHGY212. A 3-ring binder-ready version of the text book can be purchased along with the Connect electronic access code for an additional \$30 plus shipping and handling, can be purchased through a link on *my*Courses.

Course Evaluation

Readings: Assigned readings for each section may be found on Connect. The link is available via the *my*Courses page. Each reading assignment has associated LearnSmart questions that will count for <u>4% of the total course grade</u> and which **must be completed by 9 am on the last day of each section**. *Example:* Body Fluids readings must be completed by 9 a.m. on Wednesday, Sept. 9. Transport mechanisms readings must be completed by 9 a.m. on Monday, Sept. 14.

Quizzes: Online quizzes for each section of the course will be accessible on Connect which you can access via myCourses. These quizzes will count for 7% of the total course grade. **Quizzes will be available starting at 5 p.m. on the date of the last lecture of each section and open for completion for 5 days**. *Example:* Quiz 1 (Body Fluids and Transport) will be available from 5 p.m. on September 14 until 5 p.m. on September 19. No sick notes will be accepted or extensions offered for quiz non-completion. Rather, of the seven quizzes, the one quiz with the lowest mark will be dropped.

Midterm Exam #1: The midterm will be accessible on Connect via myCourses starting **Monday, October 5, 2020 at 5 p.m**. The exam will be open for 72 hrs. You will have 3.5 consecutive hours to complete the exam during this period. Topics included: Body Fluids, Transport Mechanisms, Blood. This midterm counts for <u>22% of the total course grade</u>.

Midterm Exam #2: The midterm will be accessible on Connect via myCourses starting **Monday, November 2, 2020 at 5 p.m**. The exam will be open for 72 hrs. You will have 3.5 hours to complete the exam during this period. Topics included: Immunology and Nerve/Synapse. This midterm counts for <u>22% of the total course grade</u>.

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 accessible on Connect via myCourses and open for 72 hrs. You will have 6.5 consecutive hours to complete the exam during this period. The final exam will be **cumulative** with emphasis on CNS- Sensory/Motor and CNS – Cognitive and Muscle/ANS. The final counts for <u>45% of the total course grade</u>.

Format: All quizzes and exams will be accessible online via *my*Courses. The exams will consist of **multiple choice questions.** There will be 30 questions on each midterm exam and 60 questions on the final exam.

Students, who for serious reasons (e.g., illness or family affliction), cannot write a MIDTERM EXAM, are required to submit supporting documentation to undergrad1.physiology@mcgill.ca within ONE WEEK (by Thursday, October 8, 2020 at 5:00 p.m. for Midterm 1 and Thursday, November 12, 2020 at 5:00 p.m. for Midterm 2) following the midterm exam closing date. 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" exam (scheduled three weeks following the original exam) or to shift the weight to their final exam*. Students must email the course secretary at undergrad1.physiology@mcgill.ca indicating the option chosen. *Only one midterm's weight may be applied to the weight of the final exam. If no acceptable documentation is provided by the deadline indicated above, that midterm exam will count for zero.

Supplemental/Deferred Final Exams: 89%/45%

In the case of a supplemental exam, the additional 11% will come from the LearnSmart and end-of-section quizzes. In the case of a deferred exam, the additional 45% of the grade will come from the LearnSmart

assignments (4%), end-of-sections quizzes (7%) and two midterms (22% + 22%). The exams are held in April and are organized by the Faculty of Science: https://www.mcgill.ca/exams/dates/supdefer
See: https://www.mcgill.ca/exams/dates/supdefer

Grading

The Department of Physiology will **NOT** revise/upgrade marks except on sound academic grounds. Decimal points will be "rounded off" as follows: if the final aggregate mark is computed to be 79.5%, the mark will be reported as 80% (an A-); a final aggregate mark of 79.4% will be reported as 79% (a B+). These marks are **FINAL and NON-negotiable**.

Course Management

This is a *my*Courses 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 secure confidential manner at this site.

Learning Aids

To facilitate learning, the visual material presented in class will be available on *my*Courses (http://www.mcgill.ca/mycourses/). All review sessions and tutorials will be recorded, and may be accessed on *my*Courses.

Tutorials

The course lecturers will hold tutorial sessions before the exams as per the schedule, above.

USCAs

A system of peer undergraduate student course assistants (USCAs) consisting of knowledgeable senior students will be available to help facilitate learning. They will monitor the discussion forum on *my*Courses, respond to student emails and attend live sessions to moderate the chat window. A list of USCAs and their email addresses can be found on *my*Courses.

Course Lecturers – Office Hours

In lieu of regularly-scheduled office hours, you are welcome to contact professors to set up individual meetings via zoom: e-mail the lecturer to make an appointment.

Course Secretary

The course secretary, Ms. Jennifer Rondeau, is your first point of contact for questions related to course logistics. Example question topics she handles include: accessing course materials on *my*Courses, lecture recordings, questions about the course syllabus and exam deferrals.

Lecturers	E-mail
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Dr. Melissa Vollrath
Dr. Alvin Shrier
Dr. Ann Wechsler
Dr. David Ragsdale
Dr. Erik Cook

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Course Secretary

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