PHGY 209 – MAMMALIAN PHYSIOLOGY 1
Fall 2023

Section 001: Monday, Wednesday, and Friday from 9:35 –10:25 AM in MCMED 522
Section 002: Monday, Wednesday, and Friday from 12:35 –1:25 PM in ADAMS AUDITORIUM

Course Coordinators
Drs. Melissa Vollrath and Alvin Shrier

Monday	Wednesday	Friday	TOPIC	LECTURER
	August 30	**September 1**	**Course Overview, Homeostasis & Body Fluids**	**Dr. Vollrath** 1 + 2 lectures
Labour Day **4** No Class	**6**			
		8	**Transport Mechanisms**	**Dr. Shrier** 2 lectures
11				
	13	**15**	**Blood**	**Dr. Vollrath** 5 lectures
18	**20**	**22**		
25	**27**	**29**	**Immunology**	**Dr. Vollrath** 5 lectures
Oct. 2	**4**	Fall Break **6** No Class		
Thanksgiving **9** No Class	Fall Break **11** No Class	**13**	**Nerve/Synapse**	**Dr. Ragsdale** 6 lectures
16	**18**	**20**		
23	**25**			
		27	**CNS/Sensory** *and* **Cognitive/Motor**	**Dr. Cook** 6 + 5 lectures
30	**November 1**	**3**		
6	**8**	**10**		
13	**15**	**17**		
20				
	22	**24**	**Muscle/Autonomic Nervous System**	**Dr. Ragsdale** 7 lectures
27				
	29	**30 Thursday** Follows Monday Schedule *Makeup date*		
		December 1		
4				

NO LECTURES will be held on the following dates: Labour Day (Sept. 4), Thanksgiving (Oct. 9), Fall Reading Week (Oct. 6-11)

Midterm Exam: **Tuesday, October 17, 7** – **8:30 PM (**Locations TBA)
Material: Body Fluids, Transport Mechanisms, Blood, Immunology

Final Exam: **Held during the final exam period in December** (Dec. 7 – 21**)**.
Time and date determined by the Faculty of Science.
Material: Cumulative, with emphasis on CNS sections: Nerve/Synapse, Cognitive/Motor, Sensory, and Muscle/ANS

Mark Distribution: Midterm 30%, Final 55%, Quizzes 10%, SmartBook Homework 5%

The midterm and final exam will be held in person. *This could change if necessitated by public health guidelines.*

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Textbook Readings
Vander's Human Physiology: The Mechanisms of Body Function, 16th edition (2023)
SmartBook Homework Assignments
and
End-of-Section Quizzes

LECTURER	TOPIC	HOMEWORK Due *(& Quiz Opening)*	End-of Section QUIZ Due	Vander's 16th Edition
Dr. Vollrath	Body Fluids	Sept. 11, 5 PM	Sept. 16, 5 PM	Sections 1.1-**1.3, 1.4**, 1.9; Section 2.3; Section 14.6
Dr. Shrier	Transport Mechanisms	Sept. 11, 5 PM	Sept. 16, 5 PM	Sections 4.1-4.4; Section 3.2; Section 12.10
Dr. Vollrath	Blood	Sept. 22, 5 PM	Sept. 27, 5 PM	Sections 12.1, 12.10, 12.12, 12.23-12.26
Dr. Vollrath	Immunology	Oct. 4, 5 PM	Oct. 16*, 5 PM *Extended due to break	Sections 18.1-18.6
Dr. Ragsdale	Nerve/Synapse	Oct. 25, 5 PM	Oct. 30, 5 PM	Sections 6.1-6.3 and 6.8-6.9 and 6.12-6.13
Dr. Cook	CNS/Sensory	Nov. 8, 5 PM	Nov. 13, 5 PM	Sections 6.15-16.17 and 6.19; 7.1-7.9
Dr. Cook	Cognitive/Motor	Nov. 20, 5 PM	Nov. 25, 5 PM	Sections 8.1-8.3 and 8.5 and 10.1-10.4
Dr. Ragsdale	Muscle & Autonomic Nervous System	Dec. 4, 5 PM	Dec. 9, 5 PM	Sections 9.1, 9.4, 9.7-9.9 and Section 6.18

Instructor-Led Tutorials

LECTURERS and TOPICS	DATE	TIME	Location
Drs. Vollrath & Shrier Body Fluids and Transport Mechanisms	Tuesday, Sept. 19	6:00 – 7:00 PM	McMed 504
Dr. Vollrath Blood	Tuesday, Sept. 26	6:00 – 7:00 PM	McMed 504
Dr. Vollrath Immunology	Thursday, Oct. 12	6:00 – 7:00 PM	STBIO S1/3
Dr. Ragsdale Nerve/Synapse	Tuesday, Oct. 31	6:00 – 7:00 PM	McMed 504
Dr. Cook CNS Sensory/Motor/Cognitive	Tuesday, Nov. 28	6:00 – 7:30 PM	McMed 504
Dr. Ragsdale Muscle/Autonomic Nervous System	Tuesday, Dec. 5	6:00 – 7:00 PM	McMed 504

Note: No new material will be introduced during 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 students from both sections of the course.

When 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 professors. Students studying in English for the first time are especially encouraged to attend tutorial sessions.

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General Information

Physiology is the study of normal functional activities in the living organism. These activities will 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.

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.

PHGY 209 and 210 are required courses for all Physiology Programs and are prerequisites for all upper-level Physiology courses. They are required or complementary courses for students registered in other biomedical-science departments in the Faculty of Science, as well as professional programs in Physical Therapy, Occupational Therapy, and in Kinesiology.

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 take the laboratory courses PHGY 212 and 213; it is recommended that these be taken concurrently with PHGY 209 and 210, respectively. Due to space limitations only students in these programs are allowed to register for the laboratory courses.

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 (2023). Each reading is associated with a SmartBook assignment collectively worth 5% of the total course grade. SmartBook is accessed via the McGraw-Hill Connect application which can be reached from *my*Courses. This is an electronic subscription service and the cost for electronic access to the textbook and SmartBook assignments and quizzes is $80. The textbook will also be used for PHGY 210. A 3-ring binder-ready version of the textbook can be purchased for an additional $30 plus shipping and handling once you have purchased McGraw-Hill Connect access, through a link on *my*Courses.

Course Evaluation

SmartBook Readings and Homework Assignments: Assigned readings for each section may be found on McGraw-Hill Connect. The link is available via the *my*Courses page. Each reading assignment has associated SmartBook questions that will collectively count for 5% of the total course grade and which **must be completed by 5 PM on the last day of each section**. *Example:* the Body Fluids and Transport Mechanisms homework assignments must be completed by 5 PM on Monday, Sept. 11. No sick notes will be accepted, and no extensions will be offered. Rather, of the eight homework assignments, the one with the lowest mark will be dropped.

Quizzes: Online quizzes for each section of the course will be accessible on McGraw-Hill Connect which you can access via *my*Courses**.** The quizzes will count for 10% of the total course grade. **Quizzes will be available starting at 5 PM on the last day of each section** *(see course syllabus and/or calendar on myCourses)* **and be open for completion for 5 days**. *Example:* Quiz 1 (Body Fluids and Transport) will be available from 5 PM on September 11 until 5 PM on Sept. 16. **Once the quiz is started you will have 1 hour to complete it**. No sick notes will be accepted, and no extensions will be offered for quiz non-completion. Rather, of the seven quizzes, the one quiz with the lowest mark will be dropped.

Midterm Exam: The midterm will be held on **Tuesday, October 17 from 7 – 8:30 PM**. The exam location will be posted on *my*Courses the morning of the exam. Topics include Body Fluids, Transport Mechanisms, Blood, and Immunology. The midterm exam counts for 30% of the total course grade.

Students, who for serious reasons (e.g., illness or family affliction), cannot write the midterm, are required to submit supporting documentation to undergrad1.physiology@mcgill.ca within **ONE WEEK** of the midterm exam **(*by Tuesday, October 24 at 5 PM***. 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 write a **"Deferred"** midterm (*held on **Wednesday, November 1 from 7 – 8:30 PM**).* ***Students with a validated reason for not being able to write the deferred exam*** will be allowed to shift the weight of the midterm exam to the weight of the final exam**. If no acceptable documentation is provided by the Oct. 24 deadline, the midterm exam grade will be zero.**

Final Exam: Held during the final exam period, date determined by the McGill Exams Office. The final exam will be **cumulative** with emphasis on Nerve/Synapse, CNS- Sensory/Motor, CNS – Cognitive and Muscle/ANS. The final exam counts for 55% of the total course grade.

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Exam Format: The quizzes and exams will consist of **multiple-choice questions.** There will be 5 – 10 questions on each quiz, 30 questions on the midterm exam and 70 questions on the final exam.

Supplemental/Deferred Final Exams: 85%/55%
In the case of a supplemental exam, the additional 15% will come from SmartBook homework assignment and end-of-section quizzes. In the case of a deferred exam, the additional 45% of the grade will come from the SmartBook homework, end-of-sections quizzes and midterm exam. These exams are held in April and are organized by the Faculty of Science: 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" as follows: if the final aggregate mark is 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+). Marks are **FINAL and NON-negotiable**.

Course Management
PHGY 209 is a *my*Courses managed course. 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. All lectures and tutorials will be recorded and may be accessed on *my*Courses*. **Unless technical issues arise.*

Tutorials
The course lecturers will hold tutorial sessions as per the schedule, above. USCAs may also hold a tutorial, TBD.

USCAs/TEAM members
Peer Undergraduate Student Course Assistants (USCAs)/ Tomlinson Engagement Award for Mentoring (TEAM) members are available to help facilitate learning. These knowledgeable senior students will monitor the discussion forum on *my*Courses, respond to student emails and attend lectures. A list of USCAs and their email addresses can be found on *my*Courses.

Course Lecturers – Office Hours
When possible, course lecturers will be available following each lecture to answer your questions. In lieu of regularly scheduled office hours, you are welcome to contact professors via email to set up individual meetings.

Course Administrator
The course administrator, Mr. Alex Piciacchia, is the first point of contact for questions related to course logistics. Topics he handles include accessing course materials on *my*Courses (i.e., SmartBook, lecture recordings), questions about the course syllabus and exam deferrals.

Lecturers	**email**
Dr. Melissa Vollrath	melissa.vollrath@mcgill.ca
Dr. Alvin Shrier	alvin.shrier@mcgill.ca
Dr. David Ragsdale	david.ragsdale@mcgill.ca
Dr. Erik Cook	erik.cook@mcgill.ca

Course Administrator
Mr. Alex Piciacchia undergrad1.physiology@mcgill.ca

***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/ for more information).*

***Note 2:** 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 3:** © Instructor generated course materials (e.g., recorded lectures, slide/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.*