# MAMMALIAN PHYSIOLOGY 1 PHGY 209 Sections 001 & 002

# LECTURE SCHEDULE 2019-2020

Section 001→Monday, Wednesday, and Friday from 9:35 a.m. -10:25 a.m. Stephen Leacock Building, Room 132

**Section 002**→Monday, Wednesday and Friday from 12:35 p.m. - 1:25 p.m. Adams Building, FDA Auditorium, 3450 rue University

# **Course Co-ordinators:**

Dr. M. Vollrath (514-398-2410), McIntyre Medical Bldg., Room 1234
 Dr. A. Wechsler (514-398-4341), McIntyre Medical Bldg., Room 1135
 Dr. A. Shrier (514-398-2272), Bellini Medical Bldg., Room 165

2019	Monday	Wednesday	Friday	TOPIC	LECTURER	
Sept.	LD	4	6	Introduction &	Dr. Vollrath (3)	
	9			Body Fluids		
		11	13	Transport Mechanisms	Dr. Shrier (2)	
	16	18	20	Disad	Dr. Weeheler (E)	
	23	25		Blood	Dr. Wechsler (5)	
			27		Dr. Vollrath (5)	
Oct.	RH	2	4	Immunology		
	7	YK	11			
	TG	16	18			
	21	MT		Namus/Cumanas	Dr. Ragsdale (6)	
			25	Nerve/Synapse		
	28	30				
Nov.			1	— CNS – Sensory/Motor	Dr. Frile Coale (40)	
	4	6	8			
	11	13	15	and CNS –	Dr. Erik Cook (10)	
	18	20	22	Cognitive		
ľ	25	27	29	Muscle/Autonomic	Dr. Događala (E)	
Dec.	2	(Tuesday) 3		Nervous System	Dr. Ragsdale (5)	

LD: Labour Day (Monday, Sept. 2)

NO LECTURES will be held on the following dates: RH: Rosh Hashanah (Monday, Sept. 31); YK: Yom Kippur (Wednesday, October 9 TG: Thanksgiving (Monday, Oct. 14); MT: Midterm Prep (Wednesday Oct. 23)

Midterm Exam: Wednesday, October 23, 2019 from 7:00 - 8:30 p.m. (location to be announced)

<u>Material:</u> Body Fluids, Transport Mechanisms, Blood, Immunology Mark Distribution: Midterm 25%, Final 70% Online Quizzes 5%

Final Exam: During final exam period in December. Time and location determined by the Faculty of

Science.

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# TUTORIAL SESSIONS 2019

LECTURERS	DATE	TIME	LOCATION
Drs. Vollrath & Shrier Body Fluids and Transport Mechanisms	Tuesday, Oct. 1	5:30 – 6:30 p.m.	MCMED 522
Dr. Wechsler Blood	Thursday, Oct. 10 5:30 – 6:30 p.m		MCMED 522
Dr. Vollrath Immunology	Wednesday, Oct 16	5:30 – 6:30 p.m.	MCMED 1034 (Not recorded)
Dr. Cook CNS Sensory/Motor/Cognitive	Tuesday, Nov. 26	5:30 – 7:00 p.m.	MCMED 522
Dr. Ragsdale Muscle/Autonomic Nervous System	Tuesday, Dec. 3	5:30 – 7:00 p.m.	MCMED 522

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 regular class.

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.

<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 <a href="https://www.mcgill.ca/students/srr/honest/">www.mcgill.ca/students/srr/honest/</a> for more information).

<u>Note 2</u>: In accord with McGill University's Charter of Students' Rights, students have the right to submit in English or in French any written work that is to be graded (except in courses where knowledge of a language is one of the objectives of the course).

<u>Note 3:</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 4:</u> © Instructor generated course materials (e.g., 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.

# MAMMALIAN PHYSIOLOGY 1 PHGY 209 Sections 001 & 002 REQUIRED TEXTBOOK READINGS:

Vander's Human Physiology: The Mechanisms of Body Function, 13<sup>th</sup>, 14<sup>th</sup> or 15<sup>th</sup> edition

LECTURER	TOPIC	PAGES
		Vander's 13th Edition:
		Chapter 1 (all); Pages 27-30; 363-364; 506; 594-595
Dr. M. Vollrath	Body Fluids	Vander's 14 <sup>th</sup> Edition: Chapter 1 (all); Pages 27-30; 361-362; 498-499; 586-587
		Vander's 15 <sup>th</sup> Edition:
		Chapter 1 (all); Pages 27-30; 363-364; 503; 595-596
		Vander's 13 <sup>th</sup> Edition:
		Pages 96-113; 48-51; 395-402
Dr. A. Shrier	Transport Mechanisms	Vander's 14 <sup>th</sup> Edition:
Di. A. Offici	Transport Medianisms	Pages 95-113; 46-51; 396-403
		Vander's 15 <sup>th</sup> Edition:
		Pages 95-113; 46-51; 399-406
		Vander's 13 <sup>th</sup> Edition:
		Pages 398-402; 404-405; 428-439
Dr. A. Wechsler	Blood	Vander's 14 <sup>th</sup> Edition:
B1.74. Weensier	Biood	Pages 361-66; 396-403; 405-406; 428-34
		Vander's 15 <sup>th</sup> Edition:
		Pages 363-367; 402-409; 431-437
		Vander's 13 <sup>th</sup> Edition:
	Immunology	(Chapter 18) Pages 653-688
Dr. M. Vollrath		Vander's 14 <sup>th</sup> Edition:
Di. w. vomaar		(Chapter 18) Pages 643-669
		Vander's 15 <sup>th</sup> Edition:
		(Chapter 18) Pages 655-686
		Vander's 13 <sup>th</sup> Edition:
		Ch. 6 138-142; 145-172;
Dr. D. Ragsdale	Nerve/Synapse	Vander's 14 <sup>th</sup> Edition:
Di. D. Magodalo	14c1vc/Cyriapsc	Ch. 6 137-140; 143-170
		Vander's 15 <sup>th</sup> Edition:
		Ch. 6 137-140; 143-170
Dr. E. Cook	CNS – Sensory	Vander's 13 <sup>th</sup> , 14 <sup>th</sup> and 15 <sup>th</sup> Edition:
D1. 2. 000K		Ch. 6 (D only, skip Autonomic Nervous System); Ch. 7 (all)
Dr. E. Cook	CNS - Cognitive/Motor	Vander's 13 <sup>th</sup> , 14 <sup>th</sup> and 15 <sup>th</sup> Edition:
D1. L. 000K	CNS - Cognitive/Motor	Chapter 8 (all) and Chapter 10 (all)
	Muscle & Autonomic	Vander's 13 <sup>th</sup> Edition:
		Ch. 6 180-186; Ch. 9 257-291
Dr. D. Ragsdale		Vander's 14 <sup>th</sup> Edition:
Di. D. Nagsaalo	Nervous	Ch. 6 178-183; Ch. 9 255-290
	System	Vander's 15 <sup>th</sup> Edition:
	•	Ch. 6 177-183; Ch. 9 257-292

**Please note:** Students are responsible for these readings, as they will enhance the subjects covered in the lectures and may be tested on the midterm and/or final examinations.

# MAMMALIAN PHYSIOLOGY 1 PHGY 209 Sections 001 & 002

#### **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 (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 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.

Students in all Physiology programs 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**

During the 2019/2020 academic year, PHGY 209 lectures will be held **on Mondays**, **Wednesdays**, and **Fridays**. **Section 001** lectures will be held from **9:35 to 10:25 am** in the **Stephen Leacock Building (855 Sherbrooke Street West) in Room 132**. **Section 002** will be held from **12:35 am to 1:25 pm in the Adams Building**, **FDA Auditorium (**3450 rue University**)**.

#### **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 (2018). It is available for purchase in the University Bookstore at 3544 Parc Avenue. The 13<sup>th</sup> or 14<sup>th</sup> editions ate also suitable.

### **Course Evaluation**

Quizzes: Online quizzes for each section of the course will be accessible on *myCourses*. Quizzes will count for 5% of the 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 13 until 5 p.m. on September 18. No sick notes will be accepted or extensions offered for quiz non-completion. Rather, of the six quizzes, the one with the lowest mark will be dropped.

Midterm Examination: The midterm will be held in the evening of Wednesday, October 23, 2019 from 7:00 - 8:30 p.m. at a location that will be listed on *my*Courses at a later date. It will cover the following topics: Body Fluids, Transport Mechanisms, Blood and Immunology and count for 25% of the course grade.

Final Exam: The final will be held during the final exam period at a date and location determined by the McGill exams office. The final exam will be cumulative and count for 70% of the course grade.

**Format:** The format of the exams and quizzes will be **Multiple Choice Questions.** There will be 30 questions on the midterm and 70 questions on the final exam.

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, McIntyre Bldg., Room 1021 within ONE WEEK (by <u>Wednesday</u>, October 30, 2019 at 4:00pm) following the midterm exam date. The note must indicate clearly the reason for being unable to write the midterm exam on <u>Wednesday</u>, Oct. 23, 2019. Following submission of a valid note, students will have the option to write a "Deferred" exam (scheduled during the week of November 11, 2019) or have the final exam count for 95%\* of their grade Students must email the course secretary at <u>undergrad1.physiology@mcgill.ca</u> by <u>Wednesday</u>, Nov. 6, 2019 at 4:00pm indicating the option chosen. If no acceptable documentation is provided by the deadline indicated above, the midterm exam will count for zero and the final exam will count for 70%\*

# **Supplemental/Deferred Final Exams: 70%/95%**

The exams are held in April 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 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**.

# **Library Arrangements**

Most of the reading area in the Medical Library is open to students taking Physiology, and they are encouraged to consult the various library holdings.

# **Course Management**

This is a *my*Courses managed course. All course general information and announcements will be posted at <a href="http://www.mcgill.ca/mycourses/">http://www.mcgill.ca/mycourses/</a>. Please visit the site often (requires McGill username and password) to check for updates. As well, information such as grades will be retrievable in a secure confidential fashion at this site.

# **Learning Aids**

To facilitate learning, the visual material presented in class (much of it with animations) will be available on *my*Courses (<a href="http://www.mcgill.ca/mycourses/">http://www.mcgill.ca/mycourses/</a>). If you wish to purchase a printed version of the slides/notes (rather than print on your own), a course pack will be available for purchase from PULS (Physiology Undergraduate League of Students, Rm. 1017 McIntyre Medical Sciences Building at a date to be announced in class). As the visual material is revised each year, students are advised to buy the latest version rather than use notes from previous years. As well, the lectures and tutorials will be automatically recorded, and these recordings may also be accessed on the *my*Courses site.

# **Tutorials**

The course lecturers will hold tutorial sessions according to the attached schedule. Verify *my*Courses regularly for possible revisions. In addition, a system of peer undergraduate student course assistants (USCA) consisting of knowledgeable senior students will be available to help facilitate learning. The list of USCAs is posted on *my*Courses.

You are also welcome to see lecturers individually in their offices. In this case, you must telephone or e-mail the lecturer you wish to see and make an appointment beforehand.

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PHGY 209 Lecturer	<u>S</u> Office	<u>Telephone</u>	<u>E-mail</u>	
Dr. M. Vollrath Dr. A. Shrier Dr. A. Wechsler Dr. D. Ragsdale Dr. E. Cook	McIntyre - Room 1234 Bellini - Room 165 McIntyre - Room 1135 MNI-Neurobiology Unit McIntyre - Room 1225	514-398-2410 514-398-2272 514-398-4341 514-398-5048 514-398-7691	melissa.vollrath@mcgill.ca alvin.shrier@mcgill.ca ann.wechsler@mcgill.ca david.ragsdale@mcgill.ca erik.cook@mcgill.ca	
Course Secretary				
Ms. Jennifer Rondea	au McIntyre - Room 1021	514-398-4315	undergrad1.physiology@mcgill.ca	