



UNIVERSITY OF BRITISH COLUMBIA
School of Kinesiology
Kinesiology 132 002 (3.0)
Systems Physiology II
2020W Term W2
(course formerly KIN 191)

Prerequisite / Corequisite

None

Class Location

Fully online (www.canvas.ubc.ca)

Lectures

Asynchronous: lectures recorded and posted to Canvas to view on your schedule

Synchronous: meetings on Wednesdays 10 – 10:50 am (live, but will be recorded and posted to Canvas)

Labs (depends on your section)

L1A (Monday): 2 – 4 pm / L1B (Tuesday): 2 – 4 pm / L1C (Wednesday): 2 – 4 pm / L1D (Thursday): 2 – 4 pm / L1E (Friday): 8 – 10 am / L1F (Wednesday): 5 – 7 pm

Course Instructor

Rob Langill (he/him/his) / Email: rob.langill@ubc.ca

Other Instructional Staff – teaching assistants (TAs)

Sobhan Mardan-Dezfouli (he/him/his) / Email: sobhan.mardan-dezfouli@ubc.ca

Viviana Shiffman (she/her/hers) / Email: viviana.shiffman@ubc.ca

Jasmine Gill (she/her/hers) / Email: j.gill@ubc.ca

Preferred Contact Mode

General questions

Post these to the General Questions Discussion Board on Canvas in the Course Information module.

Course Content Questions

Post these to the specific System Discussion Boards on Canvas for the specific module (e.g. cardiovascular questions on the Cardiovascular System Discussion Board).

Personal questions

For any topics that relate specifically to yourself send a direct email to me or the TA. In the subject heading put KIN 132 002. If you want to set something up to video chat one-on-one that can also be arranged through email. We will do our best to respond within 24 – 48 hours. Keep in mind that myself and the TAs will not be checking email evenings or weekends.

Course Description

Human physiology and anatomy are the sciences of the function and structure of the living human body. Study usually centers on the body “systems”, a group of organs working together to perform specific functions. In this course the focus will be on the cardiovascular, respiratory, urinary, digestive, reproductive, lymphatic, and immune systems.

Rationale

Our study will establish foundational knowledge in the way our bodies function and are structured within the systems examined. From this base of general physiology and anatomy the role of kinesiology can be developed in future courses.

Learning Outcomes

By the end of this course students will be able to:

- Understand the basic anatomy and physiology that makes up any of the systems examined.
- Appreciate, as the textbook states, structure (anatomy) is a determinant of – and has coevolved with – function (physiology). To have a clear understanding of a system you must bring both anatomy and physiology back together.
- Understand the importance of homeostasis and the various control systems involved.
- Realize that many physiological functions involve multiple systems working together.
- Describe how information that controls the systems examined flows over distances both long and short.
- Realize the importance of controlling the exchange of materials between compartments and across cellular membranes.

Learning Materials

Required: Widmaier, E.P., H. Raff, and K.T. Strang. (2019) Vander’s Human Physiology. 15th Edition, McGraw-Hill (either e-book or paper copy) and access to the McGraw-Hill Connect site.

For purchase go through the bookstore (www.bookstore.ubc.ca/textbooks) or McGraw-Hill online (instructions are on the Canvas site). You need to get the textbook and a unique access to the McGraw-Hill Connect site which can only be done through the bookstore or McGraw-Hill.

Course Structure

General Information

The course is organized around seven different systems (CV: cardiovascular; RS: respiratory; UR: urinary; DM: digestive and metabolism; RP: reproductive; LM: lymphatic; IM: immune).

Assume when times are given they mean the time at U.B.C. (Vancouver, BC).

Pre-Synchronous Meeting

Asynchronous lectures (on the Canvas site) will be recorded as a series of videos with each corresponding to the equivalent textbook section. While these can be viewed on your own schedule the idea is that they will be viewed before a corresponding synchronous meeting (this way you can submit any questions for the corresponding synchronous meeting).

Reading comprehension assignments (on the McGraw-Hill Connect site) will also be given weekly that correspond to the equivalent textbook sections. These will involve reading textbook sections and answering questions to test how well you are understanding the material.

Synchronous Meeting

Synchronous meetings (in the Course Room of Collaborate Ultra on the Canvas site) will be done on Wednesdays 10 – 10:50 am. The focus will be:

- Key points about the weekly material.
- Areas of lower comprehension on the reading assignments.
- Student questions posted to the specific System Discussion Board.

These synchronous meetings will be done live but recorded for later posting on the Canvas site.

Exams

Testable material will be from the textbook, reading comprehension assignments, asynchronous lectures, and synchronous meetings. Exams (on the McGraw-Hill Connect site) will be 50 minutes but you will be able to write anytime between 7 am – 7 pm on Fridays. Exams are open book, but must be done individually with no assistance from others. Test formats will be multiple choice (20 questions – 20 marks) and short answer (3 questions – 10 marks). Practice exam questions (on the McGraw-Hill Connect site) will be made available the week before exams so students have an opportunity to get some feel for test questions.

Labs

The focus of the labs will be the anatomy assignment and the format will have 2 parts:

- When we start a new lab, an overview will be done asynchronously and available at the start of your lab section for viewing. At the same time the anatomy assignment for the system being examined will be made available.
- Between new labs there will be time for questions relating to the anatomy assignment **if requested**.
 - Students with questions will send an email by 5 pm the day before your lab section to the TA leading that lab section.
 - If a request is made then both student(s) and TA will sign on (your lab section of Collaborate Ultra on the Canvas site; not the main Course Room) to meet online. If no students contact the TA then it will be assumed the time is not needed that week and there will be no lab.

Questions about the material will not be answered the week an assignment is due (for example; no cardiovascular anatomy questions answered the week the cardiovascular anatomy assignment is due).

Anatomy Assignments

Material will focus mostly on identification of anatomical structures in diagram format. Occasionally, other material will be asked for (for example; identify an artery and provide an indication of where it supplies blood to). The diagrams will be presented on power point slides and you will have an answer sheet that will be submitted in either WORD or PDF formats. You are welcome to work on the anatomy assignments together with other students (group work), but each student must submit their results individually. Assignments are due at 5 pm the day before your lab section. Needed information will be found in lectures, some in the textbook, but often you will need to seek out sources for the answers (the textbook is mostly physiology so it does not have a lot of anatomy material).

Schedule of Topics

No synchronous meetings or labs: February 15 – 19 (Midterm Break)

Holidays: April 2 (Good Friday); April 5 (Easter Monday)

Classes end: April 14 (Wednesday)

Exam period: April 18 – 29

Asynchronous Lectures

CV: Chapter 12 sections 1 – 6, 8 – 11, 13 – 14, 23 – 25

RS: Chapter 13 sections 1 – 9

UR: Chapter 14 sections 1 – 9, 12 – 14, 16 – 20

DM: Chapter 15 sections 1 – 7, Chapter 16 section 1

RP: Chapter 17 sections 1 – 4, 6, 8, 11, 13 – 15, 19, 24

LM: Chapter 12 section 12

IM: Chapter 18 sections 1 – 6

Reading Comprehension Assignments (due 5pm on the Sunday before the start of the week) and System Discussion Board Questions (due 5pm on Mondays to be considered for the Wednesday synchronous meetings)

January 11 – 15: chapter 12 sections 1 – 2 (10 pages)

- CV material on Friday January 15th synchronous meeting so the Reading Comprehension Assignment / System Discussion Board Questions are due 5 pm on Thursday January 14.

January 18 – 22: chapter 12 sections 3 – 6, 23 – 25 (23 pages)

January 25 – 29: chapter 12 sections 8 – 11, 13 – 14 (23 pages)

February 1 – 5: chapter 13 sections 1 – 4 (15 pages)

February 8 – 12: chapter 13 sections 5 – 9 (19 pages)

February 22 – 26: chapter 14 sections 1 – 6, 14 (15 pages)

March 1 – 5: chapter 14 sections 7 – 9, 12 – 13, 16 – 20 (19 pages)

March 8 – 12: chapter 15 sections 1 – 5 (16 pages)

March 15 – 19: chapter 15 sections 6 – 7 / chapter 16 section 1 (19 pages)

March 22 – 26: chapter 17 sections 1 – 4, 6, 8, 11 (14 pages)

March 29 – April 2: chapter 17 sections 13 – 15, 19, 24, / chapter 12 section 12 (13 pages)

April 5 – 9: chapter 18 sections 1 – 2 (9 pages)

- Monday is the Easter Monday holiday so the Reading Comprehension Assignment / System Discussion Board Questions are due 5 pm on Tuesday January 6.

April 12 – 16: chapter 18 sections 3 – 6 (26 Pages)

Synchronous Meetings

- Our first week (January 11 – 15) we will be using Monday, Wednesday, and Friday 10 – 10:50 am slots.
- After that it will be Monday no lecture, Wednesday synchronous meetings, and some Friday exams.

INTRO: January 11, 13

CV: January 15, 20, 27

RS: February 3, 10

UR: February 24, March 3

DM: March 10, 17

RP: March 24, 31

LM: March 31

IM: April 7, 14

Exams (not cumulative; each is a final for that system(s)).

CV exam: February 12 (practice questions available: February 1 – 11 at 5 pm)

RS exam: March 5 (practice questions available: February 22 – March 4 at 5 pm)

UR exam: March 19 (practice questions available: March 8 – 18 at 5 pm)

DM exam: April 9 (practice questions available: March 29 – April 8 at 5 pm)

RP/LM/IM exam: April 18 – 29 (practice questions available: April 12 – day before exam at 5 pm)

Labs – anatomy assignments

Lab1 CV: overview January 11 – 15 / request for question period January 18 – 22, 25 – 29 / due February 1 – 5

Lab2 RS: overview February 1 – 5 / request for question period February 8 – 12 / due February 22 – 26

Lab3 UR: overview February 22 – 26 / request for question period March 1 – 5 / due March 8 – 12

Lab4 DM: overview March 8 – 12 / request for question period March 15 – 19 / due March 22 – 26

Lab5 RP/LM: overview March 22 – 26 / request for question period March 29 – Apr 2 / due April 12**

Lab due 5 pm the day before your lab section.

** Because of when Easter falls in the schedule all labs are due on Monday Apr 12.

Assessments of Learning

5 exams with each worth 12% (60% of overall mark).

12 weekly reading comprehension assignments (10 counting); participation mark not grade (10% of overall mark).

5 anatomy assignments with each worth 6% (30% of overall mark).

University Policies

Resources to Support Student Success

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available from the [UBC Senate Website](#).

Academic Accommodation for Students with Disabilities

The University's goal is to ensure fair and consistent treatment of all students, including students with a disability, in accordance with their distinct needs and in a manner consistent with academic principles. Students with a disability who wish to have an academic accommodation should contact Centre for Accessibility without delay.

Academic Integrity

All UBC students are expected to behave as honest and responsible members of an academic community of higher learning and research. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action. It is your responsibility, as the student, to become familiar with and understand the consequences of violating the University of British Columbia's:

- [Academic Honesty and Plagiarism Policies](#)
- [Student Declaration](#)
- [Student Conduct during Examinations](#)
- Any special rules for conduct set out by the course instructor or teaching assistants.

Online Communications

In this course, and throughout your program, you are expected to communicate in a respectful and professional manner with your fellow students, teaching assistants, and instructors. Please ensure you review and are familiar with the [Student Guidelines for Respectful Online Conduct](#) from the UBC Equity & Inclusion Office.

Students Learning Outside of Canada

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities. Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: [Freedom of Expression](#).

Course Policies

Course Exams and Assignments

Students are reminded that they must be available to write the exams when scheduled and that late assignments will not be accepted. There is no late policy and material submitted late will receive a grade of zero. There are NO OPPORTUNITIES TO EARN EXTRA CREDITS. So, please pay attention to the dates and deadlines.

Authorized Absences

Students who know in advance that they will be unavoidably absent should appeal for special accommodation from the instructor as early in the term as possible to determine how any missed graded work will be completed. The School of Kinesiology will not normally consider special accommodation without timely notification. A minimum of two weeks notification is expected and documentation will be required.

Unforeseen Absences

Where prior notification of absence from graded work is not possible (e.g. due to unforeseen illness or family crisis), students should contact the instructor as soon as possible upon their return to class. Supportive documentation, submitted to the Undergraduate Advising Centre, will be requested. Students who miss the final examination MUST apply to the Undergraduate Advising Office at the earliest possible date to request consideration for Academic Concession. For in-term or final exams go to [Academic Concession](#) and select either:

- Academic Concession for In-Term Work.
- Academic Concession for Final Exams.

Note if you are taking this course and a non-KIN student you need to request Academic Concession through your home faculty advising, not the link above.

Academic Concession is a privilege, not a right, and can be granted only by the Undergraduate Advising Office. Students who plan to be absent from graded work for varsity athletics, family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss their commitments with the instructor before the official course drop date.

The student is responsible for all material covered no matter what form it is presented in or whether you choose to be in attendance (this includes all announcements if changes need to be made).

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