



UNIVERSITY OF BRITISH COLUMBIA
School of Kinesiology
Kinesiology 132 921 (3.0) formerly KIN 191
Systems Physiology II
2021 Summer Term 2

Prerequisite / Corequisite

None

Class Location

Fully online (www.canvas.ubc.ca)

Lectures

Synchronous Meetings on Tuesdays and Thursdays 9 – 12 noon.

Course Instructor

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

Other Instructional Staff – teaching assistant (TA)

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

Preferred Contact Mode

Email: Questions can be emailed to myself or the TA with the subject heading KIN 132 921. General course or physiology content questions should be directed to the Course Instructor. Anatomy content/assignments and exam marking questions should be directed to the TA. We will do our best to respond within 24 – 48 hours (keep in mind that questions sent in the evenings or on weekends may take longer).

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, and immune systems.

Rationale

The application of kinesiology can contribute to the functional and structural properties of the human body. In order to understand this contribution, we must first establish foundational knowledge of function and structure. It is only from this base of general physiology and anatomy that the role of kinesiology can be developed.

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 five systems examined.
- See the beginnings of where anatomy and physiology lead into kinesiology and its application.
- Appreciate that structure (anatomy) is a determinant of – and has coevolved with – function (physiology). A clear understanding of a system requires bringing both anatomy and physiology together.
- Realize that many physiological functions involve multiple systems working together.
- Recognize the importance of homeostasis and the contributions of the various control systems.

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.

You **must** go through the U.B.C. Bookstore (www.bookstore.ubc.ca/textbooks) in order to get a unique access to the McGraw-Hill Connect site. There are instructions on Canvas for how to connect to the textbook resources.

Course Structure

General Information: 5 systems: cardiovascular (CV), respiratory (RS), urinary (UR), digestive (DI), and immune (IM). Assume any times listed are the U.B.C. Vancouver time zone (Pacific).

Pre-Synchronous Meeting: Students will complete readings assignments (on the McGraw-Hill Connect site) prior to synchronous meetings (textbook sections with questions to assess reading comprehension). Due before 5 pm on Mondays for Tuesday synchronous meetings and 5 pm on Wednesday for Thursday synchronous meetings.

Synchronous Meeting: Meetings (using Zoom on the Canvas site) will be divided into 50-minute lectures (9-9:50 am / 10-10:50 am / 11-11:50 am) with 10-minute breaks between each individual lecture. Synchronous meetings will be done live but recorded for later posting on the Canvas site.

Exams (physiology focus): Focus will be on physiological material covered during synchronous meetings. Exams will be online (on the McGraw-Hill Connect site) and 2 hours in length. Exams can be completed anytime on exam days between 7 am – 7 pm to accommodate other time zones. Exams are open book, but must be done individually with no assistance from others. Test formats will be multiple choice and short answer. Some practice exam questions (on the McGraw-Hill Connect site) will be available for students to get a feel for test questions.

Assignments (anatomy focus): Focus will be on identification of anatomical structures in diagram format coupled with a brief description of the function. An overview of each lab will be done during synchronous meetings. Diagrams will be presented on power point slides and combined with an answer sheet to be submitted in **WORD or PDF formats**. Assignments can be worked on together with other students (group work), but each student must submit their results individually. Anatomy assignments are due before 5 pm on Tuesdays. Some needed information will be found in lectures and in the textbook, but often you will need to seek out other sources.

Schedule of Topics

| | Synchronous Meetings / Exams (9 – 12 Noon) | Anatomy Assignments (Due 5 pm) |
|------------------------------------|--|--------------------------------|
| July 6 (Tuesday) | COURSE INTRODUCTION / CV1 / LAB 1 (CV) | |
| July 8 (Thursday) | CV2 / CV3 / CV4 | |
| July 13 (Tuesday) | CV5 / CV6 / CV7 | |
| July 15 (Thursday) | CV8 / RS1 / RS2 | |
| July 20 (Tuesday) | RS3 / RS4 / LAB 2 (RS) | LAB 1 (CV) |
| July 22 (Thursday) | CV EXAM (2 HRS) | |
| July 27 (Tuesday) | UR1 / UR2 / LAB 3 (UR) | LAB 2 (RS) |
| July 29 (Thursday) | UR3 / UR4 / DI1 | |
| August 3 (Tuesday) | DI2 / DI3 / LAB 4 (DI/IM) | LAB 3 (UR) |
| August 5 (Thursday) | RS/UR EXAM (2 HRS) | |
| August 10 (Tuesday) | DI4 / IM1 / IM2 | LAB 4 (DI/IM) |
| August 12 (Thursday) | IM3 / IM4 | |
| Aug 16 – 20 Registrar Scheduled | DI/IM EXAM (2 HRS) | |

Assessments of Learning

Exams (72% overall); CV EXAM 24%, RS/UR EXAM 24%, DI/IM EXAM 24%.

Reading assignments (8% overall); participation mark not a grade, complete 8 or more for full marks, partial marks for less than 8.

Anatomy assignments (20% overall); LAB 1 (CV) 5%, LAB 2 (RS) 5%, LAB 3 (UR) 5%, LAB 4 (DI/IM) 5%.

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: 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. For in-term work 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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