
Course Information

Instructor Name:	Dr. Jonathan D. Smirl	Classroom #:	ENA 201
Phone Number:	403-220-8426	Day(s) Class Meets:	MWF
Email Address:	jonathan.smirl@ucalgary.ca	Time Class Meets:	15:00-15:50
Office #:	KNB 3300E	Course Website:	D2L
Office Hours:	By Appointment	Labs:	KNB 152
			T/R 08:00, 10:30, 13:00 OR 15:30, W 16:00

Laboratory Teaching Assistants:

Sarah Chase	sarah.chase@ucalgary.ca
Courtney Kennedy	courtney.kennedy1@ucalgary.ca
Allison Caswell	allison.caswell@ucalgary.ca
Dana Lowry	dana.lowry@ucalgary.ca
Shrushti Shah	shrushti.shah@ucalgary.ca
Tom Tripp	thomas.tripp@ucalgary.ca

Course Description:

This course builds upon fundamental principles of human systems physiology, with a focus on how the integration of these physiological systems provides the means by which our bodies maintain homeostasis from the systemic down to the cellular level.

Prerequisites:

KNES 260 and Admission to the Faculty of Kinesiology.

Antirequisite(s):

Credit for KNES 323 and any of Biology 305, Medical Science 404, Zoology 461, or 463 will not be allowed.

Course Objectives:

1. To gain an understanding of the integrative nature of human physiology and how this interaction relates to the concept of homeostasis and its mechanisms.
2. To describe the interrelationships between various systems in the human body, and the clinical relevance of these relationships in disease.
3. To analyse the effects of exercise and extreme environments on the human body.
4. To learn laboratory techniques essential to research in physiology and physiology-related fields.
5. To collaborate with peers to design and carry out experiments and to be able to present this in written and oral formats.
6. To provide a framework for problem-solving using the principles of integrative physiology.
7. To gain an appreciation for critically analyzing published scientific literature, including the relationships between hypothesis development, hypothesis testing through experimentation, and drawing logical conclusions from experimental results.

Course Content:

Week	Date (start of Week)	Lecture Topic	Lab Topic
1	September 6	Welcome / Homeostasis	No Labs
2	September 13	Metabolism	Intro to Lab Tutor
3	September 22	Metabolism	Introduction to Research (<i>Recorded</i>)
4	September 27	Blood / Immunity	EEG (<i>Recorded</i>)
5	October 4	Cardiovascular	Bloods
6	October 11	Cardiovascular	Cardiovascular
7	October 18	Cardiorespiratory	MID-TERM REVIEW
8	October 25	Renal	Respiratory
9	November 1	Acid-Base Balances	Renal
10	November 8	TERM BREAK – No Classes	TERM BREAK – No Labs
11	November 15	Muscle	Twitch / Summation
12	November 22	Special Topics	Grip / Fatigue
13	November 29	Special Topics	Diving Response
14	December 6	Special Topics	FINAL EXAM REVIEW

Required Reading Materials:

There is not a required textbook for this class but there are two recommended ones that can provide additional resources for the course:

Recommended Reading Materials: (Optional)

Human Physiology: From Cells to Systems –5th Canadian Edition, by Laura Lee Sherwood and Christopher Ward.

You may also choose to use “Principles of Anatomy and Physiology” by Tortora and Derrickson (this is the text that has been used previously in KNES 259/260)

Assessment Components/Expectations

Grading Scale:

Letter	Percent	Grade Point Value	Description
A+	≥95.0	4.00	Outstanding
A	90.0-94.9	4.00	Excellent – Superior performance, showing comprehensive understanding of subject matter
A-	85.0-89.9	3.70	
B+	80.0-84.9	3.30	
B	75.0-79.9	3.00	Good – Clearly above average performance with knowledge of subject matter generally complete.
B-	70.0-74.9	2.70	
C+	66.0-69.9	2.30	
C	62.0-65.9	2.00	Satisfactory – Basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion.
C-	58.0-61.9	1.70	Minimum grade required if needed as a prerequisite course.
D+	54.0-57.9	1.30	
D	50.0-53.9	1.00	Minimal pass – Marginal performance, generally insufficient preparation for subsequent courses in the same subject.
F	<49.9	0	Fail – Unsatisfactory performance of failure to meet course requirements.

Evaluation of Course Content:

Assessment Tool	Weighting	Date
Mid-Term (material presented in weeks 1-7)	25%	October 25 th
Final Exam	40%	In Exam Block (TBD)
Lab Reports (top 7 of 8 will be scored, each worth 5%)	35%	Throughout Term
Total	100%	

Midterm Exam Policy:

The Faculty of Kinesiology policy is that all students are expected to write midterm exams on the dates listed on the course outline. Special accommodation may be granted by the instructor in **exceptional circumstances only**, which includes illness, participation in athletic events (varsity, national or international), domestic affliction, and religious conviction. It is the student's responsibility to supply proper documentation and/or notification prior to the originally scheduled midterm to support their circumstance. Personal travel plans and arrangements are not valid reasons for requesting a special accommodation for a midterm exam.

Final Exam:

The Final exam will be scheduled by the Registrar's office during the final exam period (Dec. 13-22, 2021).

The final exam will be 3 hours in length and will be a cumulative exam, covering information from the entire course. The format of the exam will be similar to the midterm exam (Multiple choice, Short Answer, as well as Long Answer).

Late Policy:

1. A hard copy of all lab reports must be handed in to the lab TA at the start of your respective lab unless otherwise indicated by the instructor.
2. Lab reports are due at the specified due date and time indicated on the course schedule; after that, the assignment will be considered 1 day late. **Lab Reports after 24 hours of due date = a penalty of 20%; after 24–48 hours of due date = a penalty of 50%; after 48 hours or greater of due date = a grade of 0, assignments will not be accepted.**
 - a. If you expect to submit an assignment late, please speak to your instructor as soon as possible to discuss your personal situation. It is expected you will budget your time accordingly to avoid work overload and manage personal issues to meet academic performance requirements.
 - b. Late assignments will be considered for marking if students were ill or missed the due date for some other related and acceptable reason.
 - c. Late assignments must be submitted directly to your TA/instructor (**but not under their office door**). E-mailed assignments will not be accepted for grading, unless authorized by the instructor

Additional Course Information:

Attendance at laboratory sessions is **COMPULSORY**. Any lab missed without a valid excuse cannot be made up. Labs will involve the use of body fluids, so proper lab techniques and safety precautions must be taken. Lab coats and gloves should be worn for these labs. All students are expected to participate fully in the lab exercises unless there is a physical or medical limitation (it is the student's responsibility to inform the course instructor and lab instructor of these limitations and provide appropriate documentation). The lab manual will be available on the computers in the lab and specific instructions will be provided by the lab TA for each session.

Lab reports (8 in total, top 7 will be scored; 5% each) will be due one week after the lab has been completed and will be handed in to your TA at the start of your the lab period. Lab report format will be discussed in the first lab session.

Contacting the Instructor:

Students requiring assistance are encouraged to speak with their instructor during class or office hours. If you wish to meet with the instructor outside of office hours, please phone or email the instructor to make an appointment.

Email, while commonly used, does limit the effectiveness of communications and may not be the best way for instructors to answer student questions. Therefore, the instructor may request a telephone call or personal meeting. Your instructor will inform you as to his/her expectations about emails.

Students' Union:

The Faculty of Kinesiology representative is Areeb Qayyum and can be reached at kinesrep@su.ucalgary.ca.

Supplementary Course Information

Plagiarism/Cheating/Other Academic Misconduct

(see Calendar <https://www.ucalgary.ca/pubs/calendar/current/k.html>):

A **single** offence of cheating, plagiarism or other academic misconduct is a serious act that will not be tolerated in the Faculty of Kinesiology. Penalties for such acts will be determined by the Dean and may result in a failing grade, probation, suspension, or expulsion. Any student who is uncertain if an action falls into this category should consult the instructor and/or the Calendar in advance.

Academic Accommodation Policy and Information on Student Accessibility Services:

It is the student's responsibility to request academic accommodation. If you are a student with a documented disability who may require academic accommodation and have not registered with Student Accessibility Services, please contact their office at 403-220-8237. You are also required to discuss your needs with your instructor preferably within the first fourteen (14) days of this course. Students who have not registered with Student Accessibility Services **are not** eligible for formal academic accommodation. For further information, go to <http://www.ucalgary.ca/access/>.
[ucalgary.ca/student-services/access/prospective-students/academic-accommodations](http://www.ucalgary.ca/student-services/access/prospective-students/academic-accommodations).

Accommodations on Protected Grounds other than Disability:

Students who require an accommodation in relation to their coursework or to fulfil requirements for an undergraduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to Jodie McGill, Team Lead Student Advising at jdmcgill@ucalgary.ca. Students who require an accommodation unrelated to their coursework or the requirements for an undergraduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.
<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>

Intellectual Property:

Course materials created by professor(s) (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may not be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited.

FOIP Policy:

The University of Calgary is under the jurisdiction of the Provincial Freedom of Information and Protection of Privacy (FOIP) Act. Please refer to the website for further details. <https://www.ucalgary.ca/legal-services/access-information-privacy>

Internet and Electronic Communication Device Information:

Any surfing of the Internet during lectures that is not directly related to the class discussion is distracting and strictly forbidden. Additionally, the use of any electronic devices (i.e., cellular phones) for emailing, texting, etc., is strictly prohibited. Please turn **OFF** your phone before the beginning of each lecture unless permitted. Instructors have the authority, at the discretion of the Dean to require that specific course assignments, term papers and academic exercises be submitted in an electronic format.

Library and Resources in the Library:

Visit the University of Calgary's library at <http://library.ucalgary.ca/>.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive support when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through Student Wellness Services (Room 370 MacEwan Student Centre, <https://www.ucalgary.ca/wellness-services/services/mental-health-services>) and the Campus Mental Health Strategy (<http://www.ucalgary.ca/mentalhealth/>).

Student Success

The Student Success Centre provides services and programs to ensure students can make the most of their time at the University of Calgary. Our advisors, learning support staff, and writing support staff assist students in enhancing their skills and achieving their academic goals. They provide tailored learning support and advising programs, as well as one-on-one services, free of charge to all undergraduate and graduate students. For more information visit: <https://www.ucalgary.ca/student-services/student-success>

Student Ombuds Office

The Student Ombuds Office supports and provides a safe, neutral space for students. For more information, please visit www.ucalgary.ca/ombuds/ or email ombuds@ucalgary.ca

Student Union (SU) Information

The SU Vice-President Academic can be reached at (403) 220-3911 or suvpaca@ucalgary.ca; Information about the SU, including elected Faculty Representatives, can be found here: <https://www.su.ucalgary.ca>

Graduate Students' Association (GSA) Information

The GSA Vice-President Academic can be reached at (403) 220-5997 or gsa.vpa@ucalgary.ca; Information about the GSA can be found here: <https://gsa.ucalgary.ca>

Emergency Evacuation/Assembly Points

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website: <http://www.ucalgary.ca/emergencyplan/assemblypoints>

Safewalk

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit <http://www.ucalgary.ca/security/safewalk>. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.