Kinesiology KIN 131 Section 002
Systems Physiology I
2022W Term 2

Instructor: Jenna Benbaruj (she/her/hers)
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Office Hours: By appointment
Class: Mon / Wed / Fri 8-9 am

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Acknowledgement
UBC’s Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwmə́x̌əθkwəy̓əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

Introduction: This course focuses on providing an introduction to the structure and function of the skeletal system, muscular system, integumentary system, the endocrine system, and neuro-hormonal control. The close relationship between structure and function is a primary focus, in addition to the study of movement physiology and pathophysiology. All materials you need to complete the course will be found on Canvas, and required resources are listed below.

Resources
- Lecture and Lab Material – All will be available to you on Canvas

Format of the Course
Specific course content can be found on the course Canvas page, and more detailed information will be discussed in the Course Introduction held Monday, January 9th, 2023.

- Lectures
  - Mondays, Wednesdays, and Fridays: 8:00-9:00am
  - P.A. Woodward Institutional Resources Centre, Room 5
- Labs*
  - L2A: Monday, 4:00-6:00pm (TA: Owen)
  - L2B: Tuesday, 11:00-1:00pm (TA: Owen)
  - L2C: Wednesday, 12:00-2:00pm (TA: Alifiya)
  - L2D: Friday, 11:00-1:00pm (TA: Alifiya)
  - Robert F. Osborne Centre – Unit 2, Room 125, G1 (L2A, L2B, L2D) or G3 (L2C)

* Labs are not held every week. See calendar below for dates.*
Evaluation of the Course

- **Labs: 22% Total (10% for each assignment, 2% for participation)**
  - Each lab has an associated assignment, to be completed individually
  - You have one week to complete and submit your lab assignments to Canvas
  - Assignments will require you to answer questions regarding the observed physiology, and cite similar science

- **Quizzes: 18% (3% Each)**
  - 7 quizzes will be written, the lowest graded Quiz will not be included in the calculation of the final grade
  - Quizzes will be available on Canvas from 9:00am-11:59pm on the dates listed in the Calendar below. You will have 15 minutes to complete each quiz
  - Quizzes are open-book, but are not collaborative

- **Midterms: 30% (15% Each)**
  - Dates: February 3rd and March 20th
  - Testable material for the midterms will be discussed the week prior in lecture
  - Format of the midterms will be: multiple choice, short answer, and long answer

- **Final Exam: 30%**
  - Date: TBD
  - Content from throughout the course and labs will be on the final (cumulative)
  - Format of the final will be: multiple choice, short answer, and long answer

Boundaries and Expectations

- **24-Hour Rule**
  - Upon receiving marks/feedback, please wait 24-hrs before inquiring about grades or marking. E-mails received within 24-hrs of marks being posted will not be replied to

- **Communication**
  - Your instructor and TAs will not respond to e-mails after 6:00pm, on weekends, or on holidays

- **Classroom/Lab Behaviour**
  - Students are expected to participate in a mature fashion during lectures, labs, and on Canvas. Students are expected to show respect for their fellow students and the instructors. Disruptive and disrespectful behaviour will not be tolerated
  - During labs, students will have access to delicate instruments for recording physiological signals and are expected to handle these devices with care at all times

Illness & COVID

- Since COVID-19 is still a circulating virus, it is important that we all be conscious of the health and safety of yourself and your classmates. If you are feeling sick, stay home. If you test positive for COVID-19, follow BC CDC guidelines
- If illness prevents you from attending a lab, quiz, or exam, please contact me directly and accommodations will be made. Additionally, you will be encouraged to reach out to your peers to obtain any course notes that are missed
## Course Content Schedule

<table>
<thead>
<tr>
<th>Dates of Class</th>
<th>Lectures</th>
<th>Textbook Chapters</th>
<th>Labs &amp; Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 – Jan 9&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Course Introduction &amp; Introduction to Physiology</td>
<td>Ch. 1, 6</td>
<td></td>
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<tr>
<td>Week 2 – Jan 16&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Skeletal Bone and Calcium Homeostasis</td>
<td>Ch. 11</td>
<td>Quiz #1: Jan 20&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td>Week 3 – Jan 23&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Skeletal Muscle Structure and Types</td>
<td>Ch. 9</td>
<td>Quiz #2: Jan 27&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Week 4 – Jan 30&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Muscle Function</td>
<td>Ch. 9</td>
<td>Midterm #1: Feb 3&lt;sup&gt;rd&lt;/sup&gt;</td>
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| Week 5 – Feb 6<sup>th</sup> | Muscle Function and Adaptations to Training | Ch. 9 | Quiz #3: Feb 10<sup>th</sup>  
Lab #1: EMG |
| Week 6 – Feb 13<sup>th</sup> | The Nervous System and Neurophysiology | Ch. 6, 10 | Quiz #4: Feb 17<sup>th</sup>  
Lab #1 Due |
| Week 7 – Feb 20<sup>th</sup> | READING BREAK | | |
| Week 8 – Feb 27<sup>th</sup> | The Central Nervous System and Sub-Cortical Areas | Ch. 6, 10 | Quiz #5: Mar 10<sup>th</sup>  
Lab #2: Length-Tension |
| Week 9 – Mar 6<sup>th</sup> | The Peripheral Nervous System and Neuroplasticity | Ch. 6, 7, 10 | Quiz #6: Mar 17<sup>th</sup>  
Lab #2 Due |
| Week 10 – Mar 13<sup>th</sup> | Sensory Physiology | Ch. 6, 7, 10 |  |
| Week 11 – Mar 20<sup>th</sup> | Autonomic Nervous System, Endocrine Stress Response | Ch. 6, 10, 11 | Midterm #2: Mar 20<sup>th</sup> |
| Week 12 – Mar 27<sup>th</sup> | The Endocrine System | Ch. 11, 14, 16 | Quiz #7: Mar 31<sup>st</sup> |
| Week 13 – Apr 3<sup>rd</sup> | The Endocrine and Integumentary Systems | Ch. 11, 14, 16 |  |
| Week 14 – Apr 10<sup>th</sup> | Final Exam Review | | Final Exam: TBA |

** Date listed (Ex. Week 1 – Jan 9<sup>th</sup>) indicates the Monday of the corresponding week.

### Policy on Grading Practices

- Any late submissions of lab assignments will be penalized by 10% per day. Students who miss any quizzes/exams due to unauthorized absence will receive a grade of zero. Students who cannot complete the graded work due to authorized absence will write a make-up test on a date to be determined in consultation with the instructor.

- 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.

- 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.** Students will be asked to complete an Academic Concession Form and provide supportive documentation. 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 University accommodates students with disabilities who have registered with Access & Diversity. Students whose attendance or academic performance may be severely affected by medical, emotional, or other disabilities should consult with the instructor at least 2 weeks before scheduled tests or exams to discuss any special accommodations that might be needed in order to complete course requirements. Supportive documentation from either Access & Diversity or a physician will be required by the Undergraduate Advising Office.

- The University accommodates students whose religious obligations should conflict with attendance or scheduled tests and examinations. Any accommodations should be communicated to the course instructor, preferably in the first week of class.

**Academic Integrity**  
Students are expected to follow UBC policies for academic integrity and academic misconduct, which includes practices around plagiarism, referencing and citation, and copyright. For more see, UBC’s Learning Commons Academic Integrity resources (https://learningcommons.ubc.ca/academic-integrity/).

**Accessibility**  
If you have any challenges accessing materials that will impact your success in this course, UBC’s Centre for Accessibility can support your needs by providing appropriate accommodations to support you. UBC’s Centre for Accessibility website: (https://students.ubc.ca/about-student-services/centre-for-accessibility).

**University Policies**  
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 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 on [the UBC Senate website](https://www.ubc.ca/senate).
Learning Analytics
Some of the learning technologies used for this course collect data to support the improvement of teaching and learning. This includes the collection of data related to overall class progress to provide personalized feedback, engagement in discussion forums to support the fostering of community within the course, and how resources are being accessed to support improvements to the course design. To learn more about learning analytics at the Faculty of Education and at UBC, see the What is Learning Analytics page (https://ets.educ.ubc.ca/learning-analytics/students/).

Copyright
All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

Students are not permitted to record lectures. If recorded, this will be done by course instructors and saved on Canvas.