KIN 300-001: Human Athletic Performance
(previously KIN343)

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**Office Hours:** by appointment (please email to schedule)

**Teaching Assistant:** Owen Harris  
Shalaya Kipp

**Lectures:** Mon, Wed, Fri 3:00-3:50 PM  
Room 1250, Centre for Interactive Research on Sustainability  
2260 West Mall

**General Course Information and Learning Outcomes**

Kinesiology is the study of the physiological, biomechanical, and psychosocial mechanisms contributing to the performance of human movement, athletic performance and our response to exercise. In this course, students will gain an understanding of the role of physical activity and exercise on different aspects of fitness and health. Students will also learn basic concepts in physiology pertaining to the control of movement (nervous system and muscle), the cardiorespiratory and metabolic responses to exercise (heart and lungs, muscle, and metabolism), and the adaptations in these systems following training that builds endurance, strength, or power. Students will also be exposed to the socio-cultural and historical contexts informing modern studies in Kinesiology.

A main focus of this course will be to provide students with the tools to identify and interpret the scientific literature in Kinesiology as it pertains to everyday applications in health, fitness, and/or sport. Throughout the course, students will be encouraged to reflect on the material with respect to their own physical activity practices, whether it be sport performance or recreational exercise.

**Prerequisite(s):** None  
**Corequisite(s):** None

**Required Textbook:**
There are no required textbooks for this course. Class notes and selected readings will be available, as appropriate, through the course website (canvas.ubc.ca).

**Specific Learning Objectives**
By the end of this course, you should be able to:
1. Describe the basic structure and function of the major body systems involved in movement and exercise: the skeletal muscular system; nervous system; cardiovascular and pulmonary system.

2. Describe the basic processes underlying the fueling and energizing of endurance and strength activities.

3. Describe how training parameters may be targeted based on an understanding of how the body adapts to exercise, diet, and/or the environment.

4. Identify and review current research literature related to topics in Kinesiology (including topics pertaining to physical activity, fitness, and exercise).

5. Work as a multi-disciplinary team to summarize and communicate research evidence related to a current topic related to movement, exercise, or sports science as it pertains to health, fitness, and/or athletic performance.

Learning Activities
We will meet in class every Monday, Wednesday, and Friday. Lecture materials, including reading resources, will be updated on a weekly basis on Canvas. There will be one journal club paper assigned every 3 weeks that connects to one of the class topics.

In addition to lectures, we will conduct in-class individual/collaborative quizzes ~every 3 weeks. There is a major term project in which students will work in multi-disciplinary teams to pursue a topic of their choosing, culminating in a class symposium at the end of the term. (See Canvas for more details.)

Assessment

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<tr>
<th>Assessment</th>
<th>% of Course Grade</th>
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<tbody>
<tr>
<td><strong>1. Quizzes (4 during the term)</strong></td>
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<tr>
<td>Part 1 quizzes (individual)</td>
<td>30</td>
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<tr>
<td>Part 2 quizzes (collaborative)</td>
<td>20</td>
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<tr>
<td><strong>2. Term Group Project</strong> (combination of group and individual submissions)</td>
<td>40</td>
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<tr>
<td><strong>3. Course Participation</strong> (survey, reflection, and symposium participation)</td>
<td>10</td>
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1. In-Class Quizzes (in person, but using Canvas platform)
Our quizzes will be held during class time in the lecture hall. You will first challenge the quiz on your own (Part 1). In Part 2, you may work collaboratively to review and discuss the quiz questions, after which you will submit your answers again. There may be some overlap between the quiz questions you see in Part 1 and Part 2, and Part 2 will contain additional questions based on the journal club paper.
Your individual quiz submissions from Part 1 will be worth 60% and your collaborative submission from Part 2 will be worth 40% of the quiz mark.

- There will be 4 in-class quizzes during the term (see schedule below).
- There will be no make-up quizzes granted in case of an absence.

2. Term Group Project

- The Group Term Project will be a term-long group project where you will work in teams of 3-4 on a topic of the group’s choice. Groups will be assigned at the beginning of the term with an attempt to form groups consisting of students representing a mix of majors (e.g. with representation from Arts, Science, Business, etc.) and according to your area of interest.
- This project culminates in the KIN300 Class Symposium held over the last 2-3 weeks of the term.
- Please see the Guidance Document on our course’s Canvas page for more details.

3. Course Participation

- This consists of various small assignments, including surveys, reflections, and attendance at the Class Symposium.

For all assignments, late submissions will have 5% of the grade for that assignment deducted per day. However, in some cases, late submissions will be assigned a mark of 0% when its timely submission is required in order for other students to complete their work.

Note that there is no final exam in this course.
**Class Schedule**

The following provides an overview of the topics covered in this course. The dates indicated are provided as a general estimation; some deviations in the schedule may occur.

<table>
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<tr>
<th>Topics</th>
<th>Instructors</th>
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| **Week 1-3 (Sep 5-Sep 23):**  
Skeletal Muscle System  
Neural Control of Movement | Lam, Mitchell  
Lam |
| **Mon Sep 26: Quiz #1** | |
| **Week 4-6 (Sep 28-Oct 14):**  
Neural Control of Movement cont’d  
Cardiovascular and Pulmonary System  
Physical Activity and Fitness | Lam, Blouin  
Lam, Sheel  
Lam |
| **Mon Oct 17: Quiz #2** | |
| **Week 7-9 (Oct 19-Nov 4)**  
Gait and Running  
Principles of Strength and Conditioning  
Stress and Exercise  
Nutrition and Exercise | Lam, Kipp  
Jones  
Puterman  
McCrudden |
| **Mon Nov 7: Quiz #3** | |
| **Week 11-12 (Nov 14-18)**  
Protein Intake and Muscle Growth  
Exercise and the Environment  
Historical and Sociocultural Context of Kinesiology | Mitchell  
Boushel  
Vertinsky |
| **Fri Nov 25: Quiz #4** | |
| **Week 13-14 (Nov 28-Dec 7)**  
Class Symposium | student group presentations |
Policy on Grading Practices

1. **Graded work** in this course constitutes the quizzes, lab assignments, midterm, final exam, and course participation. Students must complete the quizzes, midterm, and final exam on the scheduled date and submit their lab assignments by the scheduled deadline. Course participation marks are awarded for work that is submitted on time. **Any late submissions will be penalized by 5% per day.** Students who miss any of these evaluations due to unauthorized absence will receive a grade of zero. Students who cannot complete the graded work due to an **authorized absence** will write a make-up test on a date to be determined in consultation with the instructor.

2. **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.**

3. 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.**

4. 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.

5. 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.

6. 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.

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

Course Policies

**Classroom/Lab Behaviour**

1. Students must participate in a mature fashion in class and are expected to show respect for their fellow students and the instructors. Disruptive or disrespectful behaviour will not be tolerated in the classrooms.

2. The physiology labs will include surface anatomy and palpation to collect the data required for the lab reports. Students are expected to behave in a professional manner at all times in the laboratory classroom.

3. Students will have access to delicate instruments for recording physiological signals and are expected to handle these devices with care at all times.
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)

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/)

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 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 (https://senate.ubc.ca/policies-resources-support-student-success/).