UNIVERSITY OF BRITISH COLUMBIA - SCHOOL OF KINESIOLOGY 2023W Term 1

KIN 300-001: Human Athletic Performance

Land Acknowledgement

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (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.

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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 learn basic concepts in physiology pertaining to the control of movement (musculoskeletal and nervous system), 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 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 research 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 competitive sport performance or recreational exercise for fitness and health.

Co- or Pre-requisite(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 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 **Term Project Guidelines** section below for more details.)

Class Schedule

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

Topics	Instructors
Week 1-2:	
Defining and measuring fitness and physical activity, relation to health	Lam
Land-based Indigenous physical culture	Forsyth
Stress and exercise	Puterman
Week 3-5:	
Skeletal Muscle System (anatomy and physiology)	Lam
Applications to Training Strength and Conditioning	Jones, Mitchell
Mon Sep 25: Quiz #1	
Week 6:	
Neural Control of Movement and Motor Skills	Lam, Hodges
Neural Control of Movement and Motor Skills	Lam, Houges
Mon Oct 16: Quiz #2	
Week 7:	
Functional anatomy of the skeletal system and joints	Lam
Low back pain	Fewster lab (Evans)
Control of Walking	
Week 8:	
Anatomy and physiology of the cardiovascular and respiratory system	Lam, Sheel
Fri Nov 3: Quiz #3	
Week 9-10:	
Training for endurance	Koehle lab (Harris)
Environmental Physiology, Fuelling for Performance	Capewell, Mitchell,
	Stellingwerff
Week 12: Sociocultural Issues in Kinesiology:	
Sport and the Environment	Wilson
Marginalization in Sport and Physical Activity	Forsyth
Fri Nov 24: Quiz #4	. 0.09
Week 13-14 (Nov 27-Dec 6)	
Class Symposium	student group
	presentations

Assessment

	% of Grade
1. Quizzes (4 during the term)	55%
Quiz #1 (5%)	
Quiz #2 (17%)	
Quiz #3 (17%)	
Quiz #4 (16%)	
2. Term Group Project (combination of group and individual submissions)	35%
3. Course Participation	10%

There is **no final exam** in this course.

1. Quizzes

There will be 4 in-class quizzes during the term. Please see schedule on previous page.
 Colour-coding indicates the course material covered in each quiz. Further information will be provided in class.

2. Term Project

Please see Guidance section on the next page for more details.

3. Course Participation

• This consists of various small assignments, including surveys, reflections, in-class mini quizzes, and attendance at the Class Symposium.

Policy on Late/Missed Assessments

Any late submissions will be subjected to a 5% per day deduction of that assessment's grade.

All quizzes will be written during class time. There will be **no make-up quizzes** for any missed assessments. In the case of an approved absence (e.g. medical issue or family emergency with university-approved documentation) from a quiz, the grade from that quiz will be <u>reweighted</u> across the other quizzes. Otherwise, missed quiz will be assigned a score of zero.

TERM PROJECT - GUIDANCE

The main objective of your **Term Project** is to provide you with an opportunity to delve more deeply into an area of Kinesiology that is of personal interest and/or relevance to you. The specific learning outcomes from this assignment will provide you with:

- experience working effectively within a team
- communication skills (written and verbal) suitable for a general audience
- practice in identifying and interpreting research articles in Kinesiology
- critical analysis skills for evaluating fitness/health claims

We will assign you to a group of 4-5 people (depending on final course enrolment) by Sep 22. Please contact us if you have not been assigned or are unsure which group you are in.

Group assignments will be based on your Introductory/Team Formation Survey responses. The priority is to construct groups with members from <u>different Faculties</u>, and with common interest. You may assemble your own group, but the group members must represent diverse fields of study. Further details will be provided in class.

A note about group work

I remember when the idea of "group work" elicited fear and negative reactions during my undergraduate studies. This is understandable, especially if you have had previous bad experiences in other courses. At the same time, there are a lot of benefits to group work, especially in developing communication and teamwork skills, which are skills that you can readily apply to anything you do in the future. And ideally, I hope you end up finding the term project in this course a fun learning experience and a way to broaden your perspectives by learning from peers from diverse programs of study.

So in order to mitigate common concerns about teamwork, I have implemented different strategies that I hope will help facilitate meaningful and productive collaboration:

- Group memberships will be based, as much as possible, on your common areas of interest, as per your Introductory/Team Formation Survey responses.
- You are encouraged to assign roles to each group member. You will have the
 opportunity to self-reflect/self-evaluate your strengths and weaknesses, and as a group,
 decide in a collaborative way who is best suited to which role and develop a team
 contract that sets the ground rules for your group.
- The submitted work within this assignment will be based on both group and individual submissions.
- You will be evaluated not only on your work products but also on your group processes.
- Your TA and I are here to support you as guides and mentors through this group project.

Midway through the term project, you will be asked to submit a **self- and peer-evaluation** of your group's work. In this evaluation, you will score each group member's contribution (including

your own, providing a clear justification for your score. Your <u>justified</u> and aggregate peer review score will be used to adjust 10% of your grade from P1, P2, P3, and P4.

Similarly, at the end of the Term Project, you will be invited to submit a **final self- and peer-evaluation**, and the <u>justified</u>, aggregate peer review score will be used to adjust your grade for P6, P8, and P9.

Specific Tasks

Your Term Project consists of a series of tasks to take you step-by-step through this project. The table below provides a timeline and marks breakdown of the tasks you will need to complete as part of this term project:

Due Date	Task	Submission Type*	% of Final Grade
Oct 3	P1. Group Contract	group	(participation)
Oct 10	P2. Research Question	group	2
Oct 16	P3. Literature Search Strategy, preliminary reference list	group	3
Oct 23	P4. Preliminary Literature Review and Work Plan	group	5
Oct 23	P5. Interim Self- and Peer-Evaluation	individual	(participation)
Nov 10	P6. Draft 3MT presentation	group	1
Nov 17	P7. Peer Review	individual	5
Nov 26	P8. "3-Minute Thesis" Presentations	group	15
Dec 1	P9. Response to Reviews	group	4
Dec 7	P10. Final Self- and Peer-Evaluation	individual	(participation)
		TOTAL:	35

The "3-Minute-Thesis" Presentation

The 3-Minute-Thesis (3MT) is an annual competitive event for graduate students. The <u>3MT originated at the University of Queensland</u> in 2008, but now it is held at many universities around the world. UBC was one of the first to host such an event in North America. (If you're interested, you can read more about the 3MT competition for graduate students at UBC <u>here</u>.)

The challenge for the presenter is to describe the scope and significance of their thesis project to a non-specialist audience, making it an ideal format for our end-of-term symposium. Here, we will adopt some of the <u>same rules</u> of the <u>3MT</u> format for our end-of-term symposium. However,

there will be some important differences. Unlike the original format, we will <u>not</u> hold it as a competition and you will have a little more flexibility in preparing your slides. Here are our rules for the KIN300 3MT:

- Presentations are limited to 3 minutes maximum.
- You must prepare your presentation using PowerPoint
 - o do NOT use Prezi, Keynote, or any other desktop or web-based software
- You can choose to use whatever slide features (animations, transitions, etc.) you think will help your presentation.
- Presentations much be spoken by the presenter (no sound or video files are allowed)
- You may nominate one person to be the presenter or you can present as a group (but ensure you rehearse your transitions to stay within the 3-minute time limit)

Resources: The UBC 3MT website has a very good <u>resource page</u> to provide you with some tips.

The KIN300 Course Symposium

Our end-of-term course symposium will be held over the last 2 weeks of term, starting on Mon Nov 27, for 5 classes.

Regardless of the date of your scheduled presentation, your final presentation files will be due by midnight on Sun Nov 26).

There will be 9-10 groups presenting at each symposium session and will follow a scientific conference-style format with 3 minutes per presentation. We will determine the line-up and presentation schedule for each symposium session to represent a diversity of topics.

At the end of each symposium session, the audience will have the opportunity to **vote for the People's Choice Award** of the day (and add to your **Course Participation marks**). (Award to be determined, but at minimum, the winning group will get bragging rights.)

Policy on Grading Practices

- 1. Graded work in this course constitutes quizzes (online and in-person), assignments (individual and group submissions), and course participation. Students must complete quizzes on the scheduled date and submit 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 a quiz due to an authorized absence will have the mark from that quiz redistributed across the other online or in-person quizzes (online or in-person).
- 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 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.
- 5. 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 <u>at least 2 weeks before scheduled tests or exams</u> 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 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 Behaviour

- 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.
- A few classes may involve situations where students will be asked to participate in a
 physical activity, sometimes as a group. These activities are meant to promote a positive
 learning experience for all. Unprofessional or inappropriate comments or behaviour will not
 be tolerated.

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/).