



School of Health & Exercise Sciences

HES 100: Foundations of Health & Exercise Sciences

Fall 2024
3 Credits

We respectfully acknowledge that the land on which this course is taught is the unceded, ancestral, unsurrendered land of the Syilx Nation.

Instructor: Alex Santos (he/him)
Office: ART 127
E-mail: alex.santos@ubc.ca
Office Hours: Mondays 4pm-5pm

Lecture Time & Location

Time: Mondays & Wednesdays 5:00pm-6:30pm
Location: FIP 204

Academic Calendar Course Description

The importance of exercise, fitness, physical activity, healthy eating, and other health behaviours across the lifespan. Principles of basic exercise prescription, fitness appraisal, behaviour change, and other positive health approaches; implications for personal health/quality of life, professional success, health care. Formerly offered as HMKN 100. Credit will be granted for only one of HES 100 or HMKN 100. [3-0-0]

Prerequisite: Registration limited to students in the B.H.E.S. program.

Methods of Delivery

In lectures, we will use a variety of learning methods, including lectures, group discussions, case studies, the use of e-learning tools, and critical reflections. Experiential learning via participation in laboratories will also help students learn. Asynchronous materials will help students solidify lecture information and provide opportunities to practice.

Recommended Text

CSEP Physical Activity Training for Health (CSEP-PATH) Resource Manual, 3rd Edition
(physical or digital copy)



Learning Outcomes

After completing this course, successful students will be able to:

1. Differentiate between the three paths of BHES program and demonstrate awareness of common professional pathways in health and exercise sciences.
2. Describe foundational information relevant to health and exercise across disciplines, including but not limited to determinants of health, fitness testing methods, physical activity and exercise, exercise prescription practices, clinical conditions, and health behaviour change.
3. Understand common metrics for assessing health and physical activity across diverse populations.
4. Demonstrate competency in necessary skills relevant to professionalism and university, including but not limited to critical thinking, working with clients, using evidence-based sources, organization and communication, and working with data.
5. Integrate equity, diversity, and inclusion into their own academic and professional practice while critically reflecting on positionality, beliefs, and values.

Evaluation Criteria and Grading

Weekly Engagement Activities	10%
Midterm Exam 1	20%
Midterm Exam 2	20%
Lab Assignment 1	10%
Lab Assignment 2	10%
Lab Assignment 3	10%
Final exam	20%

Weekly Engagement Activities

The purpose of these asynchronous activities is to evaluate Learning Outcomes 2, 3 and 4. Throughout the semester, a total of 9 activities accompanied by practice questions will be posted on Canvas by the end of Thursday each week (please see timeline provided below). The purpose of the activities is to review content covered in the previous week and provide students with the opportunity to practice critical thinking questions related to the course content. Activities will range in format (e.g., review videos, survey completion, reflection post, etc.). After completing the activity, students will have the opportunity to submit an answer to critical thinking questions. The activities and questions will be available from Fridays until the **beginning of class on Mondays**



the following week. More information about asynchronous content and procedures will be given in class.

Midterm Exams

The purpose of these exams is to evaluate Learning Outcomes 1, 2, 3, and 4. The midterm exams will be in-person, written exams during class time on **October 9th and November 6th, respectively.** The exams will consist of multiple-choice questions, true or false, and short answer questions. Each midterm exam is **non-cumulative**, meaning each exam will only cover content from a specific HES sub-discipline. Review sessions leading up to the exams will help students prepare for success.

Lab Assignments

The purpose of the three lab assignments is to evaluate Learning Outcomes 1 through 5. Each lab assignment will be related to one HES sub-discipline: assignment 1 is related to allied health and exercise prescription; assignment 2 is related to exercise physiology in clinical populations; and assignment 3 is related to health behaviour change. Lab sections will help students gain the necessary information and skills to successfully complete each assignment.

Further details on each lab assignment and rubrics will be provided in the lab manual via Canvas.

Final Exam

The purpose of this written final exam is to evaluate Learning Outcomes 2, 4 and 5. The final exam will be held during UBCO's final exam period, which is between **December 9 – 20.** The final exam is **non-cumulative**, meaning only information pertinent to the last HES sub-discipline will be covered. The final exam will consist of multiple choice, true or false, and short answer questions. More information about the final exam will be provided in class along with a review session to help students prepare.

Class Policies

Attendance

Lecture and laboratory attendance is highly recommended as material discussed in both will be the substance of assignments and exams. Students who attend lectures achieve higher grades. Class participation is encouraged and has also been found to lead to higher grades. The lecture slides and other resources will be available on Canvas, but it is impossible to duplicate the discussions, activities, challenges and interactions that take place in the classroom. If you are sick but still attending, please wear a mask to lecture. If you cannot attend or are unsure, please email your professor for guidance on how to catch up.



Late Policy

It is expected that weekly activities and assignments are submitted by the posted due date. These activities are meant to bolster learning through repetition and will assist in participation during the following week's activities. In cases where assignments are late, 10% of the eligible grade will be deducted **per day**. Assignments will not be accepted for marking more than five (5) days past their due date.

There are certain extenuating circumstances that will allow for further extension of an assignment due date. These are: health concerns, family emergency, or travel for team sports. This does **NOT** apply to the group assignments (your group members are counting on you)! Please note that the instructor will not make accommodations for work schedule or other extracurricular activities. Please reach out to your instructor **BEFORE** the upcoming assignment due date and the instructor will determine eligibility for further extension on a case-by-case basis. The instructor may require that you submit written confirmation depending on the circumstances.

Final grades are not negotiable; this syllabus is the contract you agree to by registering for this course. No extra or additional assignments will be permitted to increase a student's grade at the end of the term. All students will be treated equally. Grade appeals are subject to university policies.

Missed Exam Policy

The final exam period for Fall 2024 semester is from **December 9th-20th**. If you need to miss the final exam for an extenuating circumstance, you must contact your instructor immediately (**BEFORE** the exam start) and apply for an out-of-time exam through the department and provide valid documentation of the reason for the missed final exam.

The Use of Artificial Intelligence

Students are permitted to use artificial intelligence tools, including generative AI, to gather information, review concepts or to help produce assignments. However, students are ultimately accountable for the work they submit, and any content generated or supported by an artificial intelligence tool **must be cited appropriately**. Use of AI tools is not permitted during the midterm exams or final exam of this course.

Safety & Respect in the Classroom and Beyond

UBCO students have the right to work, learn and socialize in a supportive, safe and healthy environment. The university is committed to developing a sense of community that is dedicated to creating a working and learning environment of the highest quality – one which is characterized by mutual respect, consideration, social and moral development of its members; and is free from harassment, discrimination and any form of disruptive behaviour or violence.



The university understands and recognizes that students have responsibilities related to appropriate student conduct. Students are responsible for reviewing relevant guidelines and policies.

Any student that demonstrates inappropriate behaviour; reckless behaviour that endangers themselves or others; or damages equipment will be asked to leave the class and, according to university policies, may be subject to further sanctions.

Please demonstrate professionalism and respect to the professor and other students, both in-person and virtually (i.e., e-mails). The professor of this course will ensure all possible steps are taken to guarantee a learning environment that is inclusive and equitable for all.



Tentative Course Timeline

Date	Topic	Lab	Assignment
Wed Sep 4	Welcome to HES 100!	NO LABS	
Mon Sep 9	Health & Determinants of Health		
Wed Sep 11	Physical Activity, Exercise, & Professionalism		
Mon Sep 16	Assessing Health	1: Anthropometrics & Cardiorespiratory Fitness	Weekly Activity 1 Due
Wed Sep 18	Assessing Cardiorespiratory Health		
Mon Sep 23	Muscular Strength, Endurance & Flexibility	2: Muscular Strength, Endurance, & Flexibility	Weekly Activity 2 Due
Wed Sep 25	Foundations of Exercise Prescription		
Mon Sep 30	NO CLASS	NO LABS	
Wed Oct 2	A Day in the Life: Physiotherapy		
Mon Oct 7	Midterm Review Session	3: Working with Excel Data	Weekly Activity 3 Due
Wed Oct 9	Midterm 1		
Mon Oct 14	NO CLASS	NO LABS; LAB ASSIGNMENT 1 DUE	
Wed Oct 16	Cardiovascular Conditions & Exercise		
Mon Oct 21	A Day in the Life: CEP	4: Finding Research Evidence	Weekly Activity 4 Due
Wed Oct 23	COPD & Exercise		
Mon Oct 28	Type 2 Diabetes & Exercise	5: Presentation Prep	Weekly Activity 5 Due
Wed Oct 30	Cancer & Exercise		
Mon Nov 4	Midterm Review Session	6: Lab Assignment 2	Weekly Activity 6 Due
Wed Nov 6	Midterm 2		
Mon Nov 11	READING BREAK – NO CLASSES OR LABS		
Wed Nov 13	READING BREAK – NO CLASSES OR LABS		
Mon Nov 18	A Prescription or a Conversation?	7: Working with Diverse Clients	Weekly Activity 7 Due
Wed Nov 20	A Day in the Life: Behaviour Change		
Mon Nov 25	Health Action Process Approach	8: Brief Action Planning	Weekly Activity 8 Due
Wed Nov 27	COM-B Model		
Mon Dec 2	Theories of Behaviour Change	9: Lab Assignment 3	Weekly Activity 9 Due
Wed Dec 4	Final Exam Review		



Campus Policies

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise, and harsh sanctions are imposed. For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course. Careful records are kept to monitor and prevent recidivism.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at:

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,54,111,0>

Final Examinations

Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 27-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job.

Further information on Academic Concession can be found under Policies and Regulation in the Okanagan Academic Calendar:

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0>

Grading Practices

Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record.

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014>



Student Services Resources

UBC Okanagan Disability Resource Centre

The DRC facilitates disability-related accommodations and programming initiatives to remove barriers for students with disabilities and ongoing medical conditions. If you require academic accommodations to achieve the objectives of a course, please contact the DRC at:

UNC 215 250.807.8053
email: drc.questions@ubc.ca
Web: www.students.ok.ubc.ca/drc

UBC Okanagan Equity and Inclusion Office

Through leadership, vision, and collaborative action, the Equity & Inclusion Office (EIO) develops action strategies in support of efforts to embed equity and inclusion in the daily operations across the campus. The EIO provides education and training from cultivating respectful, inclusive spaces and communities to understanding unconscious/implicit bias and its operation within in campus environments. UBC Policy 3 prohibits discrimination and harassment based on BC's Human Rights Code. If you require assistance related to an issue of equity, educational programs, discrimination, or harassment please contact the EIO.

UNC 325H 250.807.9291
email: equity.ubco@ubc.ca
Web: www.equity.ok.ubc.ca

Student Wellness

At UBC Okanagan health services to students are provided by Student Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Student Wellness for more information or to book an appointment.

UNC 337 250.807.9270
email: healthwellness.okanagan@ubc.ca
Web: www.students.ok.ubc.ca/health-wellness



Student Learning Hub

The Student Learning Hub is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies. Students are encouraged to visit often and early to build the skills, strategies and behaviors that are essential to being a confident and independent learner. For more information, please visit the Hub's website.

LIB 237 250.807.8491
email: learning.hub@ubc.ca
Web: www.students.ok.ubc.ca/slh

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Safewalk

*Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call Safewalk at **250-807-8076**.*

For more information, see: www.security.ok.ubc.ca