

# School of Health and Exercise Sciences HES 201 – Exercise Prescription | Winter Term 1, September 2024

We respectfully acknowledge the Syilx Okanagan Nation and their peoples, in whose traditional, ancestral, unceded territory UBC Okanagan is situated.

Instructor: John Sasso (he/him/his) Office: ART 163 Faculty: Faculty of Health and Social Development Department: School of Health and Exercise Sciences

# **Instructor Office Hours:**

Tuesdays at 11:00am-12:00pm or by Appointment

Office Hours will be held in-person (ART 163) unless otherwise noted

# **Academic Calendar Entry**

Exercise prescription and testing for both the healthy adult population and for special populations or persons with a disability. Credit will only be granted for HES 201 or HMKN 311. [3-0-0] Prerequisite: One of HES 105, HMKN 200 and one of HES 111, HMKN 191; and HES 120.

**Class Times** (all times in Pacific Time; local time Kelowna, BC):

LECTURE: Mondays & Wednesdays: 5:00pm – 6:30pm (COM 201)

# **Course Format**

This is a lecture-based course designed to empower students with the theory and practical foundations of programming exercise training to support health, fitness and performance outcomes in apparently healthy individuals. Students will explore the physiological bases of exercise responses and adaptations and use evidence-informed approaches to develop individualized conditioning programs for clients. Following this course, students will be able to plan, develop and evaluate exercise interventions for apparently healthy clients across the lifespan.

# **Course Delivery**

This course will be delivered in-person (unless otherwise noted). Lectures will begin at the designated course time, at the specified location. Attendance to class is highly recommended to promote improved learning, though it is not graded/required. While lecture sessions will typically be recorded and uploaded to the course website (for students who cannot attend due to health reasons), this should not be solely depended upon for learning, as technological issues arise or certain classes may not be recorded.

# **Course Overview, Content, and Objectives**

This course is designed to provide a comprehensive overview of exercise assessment and prescription for adult populations with introductory information on children, older adults, persons with disability and chronic disease. The course will examine emphasize health and fitness assessment, exercise training principles including; program design, evaluation, and application of different modes of exercise training. The learning objectives are to:

- Progress students' knowledge of how to prescribe exercise for individuals across the lifespan to improve their health, fitness and physical performance.
- Have students critically examine health and fitness assessments commonly used in the area of exercise prescription.
- Work with students to apply knowledge learned about the principles of training to design safe and effective exercise programs for individuals
- Assist students in developing their critical thinking skills to evaluate research and innovation in the area of exercise prescription
- Prepare students for the CSEP-PATH Certified Personal Trainer (CPT) requirements

**Contact:** via Canvas Message Email: john.sasso@ubc.ca

**Teaching Assistants:** Jiawen Lim **Roddie Sandilands** 



# **Learning Outcomes**

Upon successful completion of this course, students should be able to:

- 1. Apply scientific knowledge to train healthy persons, across the lifespan, toward improving health, fitness and physical performance.
- 2. Design and implement safe and effective fitness conditioning programs for individuals and groups using the principles of training.
- 3. Utilize evidence-based practice and to critically evaluate research and innovation in the area of exercise testing and prescription
- 4. Be familiar with the requirements of the CSEP-PATH Certified Personal Trainer (CPT) certification.

## **Required Resources:**

Required readings, videos and other resources will be provided through the term, which will support the content of lecture material and may be used in evaluations of course knowledge/understanding. There is no required textbook for this course

# **Recommended Resources:**

- Canadian Society for Exercise Physiology Physical Activity Training for Health • (CSEP-PATH). (2<sup>nd</sup> & 3<sup>rd</sup> Editions). Canadian Society for Exercise Physiology.
- Bayles, M. P. (2024). ACSM's exercise testing and prescription. Wolters Kluwer.
- Haff, G., & Triplett, N. T. (2016). Essentials of strength training and conditioning (4th ed.). Human Kinetics.
- Bompa, T. O., & Buzzichelli, C. (2019). Periodization: Theory and methodology of training. Human Kinetics.
- Liguori, G. (2021). ACSM's guidelines for exercise testing and prescription. Wolters Kluwer Health.
- Other resources to be assigned during the course in alignment with individual lessons.

Evaluation Criteria and Grading					
•	Quizzes (3 x 5%)		[LO1, LO2, LO4]		
•	Assignment (1 x 10%)		[LO1, LO2, LO3]		
•	Midterm		[LO1, LO2, LO3]		
•	Final Group Project		[LO1, LO2, LO3, LO4]		
•	Final Exam		[LO1, LO2, LO3, LO4]		

# **Course Assessment Details:**

Below are brief descriptions of the assessments involved in this course, including course weighting, assessment topics and estimates of time required to complete the assessment (these are estimates to help guide work requirements, however individual students may require more or less time). Due dates of assignments below are approximate and are subject to change based on course progression to permit students appropriate time for completion. Further information for each assessment will be provided during the course.

# <u>Quizzes</u>

Three quizzes will be administered via Canvas Quizzes during the term, which will be related to course content, textbook and course readings. Quizzes are designed to help guide student learning through course information, provide lower-stakes opportunities for exposure to course evaluations and to help students to ensure they understand course content prior to midterm and final exams. Each quiz will be available for completion during a specified 48-hour period. Quizzes are 'open-book' and students are encouraged to complete the quizzes using the resources available, however, they must be completed individually. Each quiz consists of 10-20 questions of multiple choice, true/false or short answer; it is estimated that quizzes will require approximately 20-30minutes to complete.

Course Weight: 15% (3 quizzes x 5%) Due Dates: September 20, October 4, November 8, 2024



## <u>Assignment</u>

One assignment will be completed that will challenge students to provide a critical analysis of exercise training requirements and training programs. Specific assignment description/overview will be provided in advance of the due date and students will be asked to provide an appropriate critique of the cases presented. It is estimated that assignment will require approximately 4-5 hours of work to complete.

# Course Weight: 10%

Due Dates: October 16, 2024

# **Exercise Prescription (Group) Project**

Students will work collaboratively within groups to critically evaluate a case study of a client and design a short-term training program to safely and effectively progress this client towards the predetermined health, fitness or performance goal. Groups will perform a detailed client and activity analysis, identify appropriate training targets and create a training program for their client, including the overall training progression and some daily training (workout) prescriptions. The Case Study will involve the submission of an analysis report of the case study and a detailed training program and rationalization. Groups will also lead a 20-minute presentation of their case and training program, including a 5-minute question and discussion period. Further information on the presentation and grading scheme will be provided in class.

## Course Weight: 25%

Due Dates: November 27-December 4, 2024

## <u>Midterm</u>

Students will complete a written test related to the respective topics covered up to the time of this assessment. The midterm will be completed either on paper or via Canvas Quizzes during class time (to be announced) in a closed-book format, and students will be provided approximately 80minutes to complete the midterm assessment (unless otherwise noted). Midterm will consist of multiple choice, true/false (and explanations), short answer and long answer questions.

Course Weight: 15%

Due Dates: October 23, 2024

## <u>Final Exam</u>

A cumulative final examination will be completed during the UBCO final exam period. This exam will be comprised of material covered throughout the term, including course lessons, required readings, and other ancillary resources as assigned through the term. The final exam will be completed in-person, via paperand-pen format and all other UBCO policies for exams apply.

## Course Weight: 35%

Due Date: To Be Announced



#	Weekday	Date	General Topic	ASSESSMENTS
1	Wednesday	04-Sep-24	Introduction + Exercise Benefits	
2	Monday	09-Sep-24	Adaptation, Conditioning, Training	
3	Wednesday	11-Sep-24	Principles & Elements of Exercise Prescription	
4	Monday	16-Sep-24	Health Screening & Risk Assessment	
5	Wednesday	18-Sep-24	Physiological Bases of ExRx & Training	QUIZ 1 opens
6	Monday	23-Sep-24	Physiological Bases of ExRx & Training	
7	Wednesday	25-Sep-24	Physiological Bases of ExRx & Training	
	Monday	30-Sep-24	NO CLASS (Truth & Reconc)	
8	Wednesday	02-Oct-24	Acute Exercise Session Planning	QUIZ 2 opens
9	Monday	07-Oct-24	Chronic Training Programming Design	
10	Wednesday	09-Oct-24	Programming Cycles + Periodization	
	Monday	14-Oct-24	NO CLASS (Thanksgiving)	
11	Wednesday	16-Oct-24	Periodization	Assignment Due
12	Monday	21-Oct-24	REVIEW	
13	Wednesday	23-Oct-24	MIDTERM	Midterm
14	Monday	28-Oct-24	Prescribing Strength & Power Development	
15	Wednesday	30-Oct-24	Prescribing Endurance Training	
16	Monday	04-Nov-24	Prescribing Speed & Agility	
17	Wednesday	06-Nov-24	Special Considerations Across Lifespan	QUIZ 3 opens
	Monday	11-Nov-24	READING BREAK	
	Wednesday	13-Nov-24	READING BREAK	
18	Monday	18-Nov-24	Special Considerations Across Lifespan	
19	Wednesday	20-Nov-24	Communicating & Reporting Prescriptions	
20	Monday	25-Nov-24	Advanced Prescription Topics	
21	Wednesday	27-Nov-24	REVIEW + Final Presentations Prep	Final Project Due
22	Monday	02-Dec-24	Final Presentations	
23	Wednesday	04-Dec-24	Final Presentations	
	EXAM PERIOD	December 9-20		Final Exam (date TBD)

## **Course Schedule** (subject to modification of topics & timelines)

# Late policy

Assignment deadlines are established to support your continued sequential and progressive learning. At the same time, we acknowledge that there are sometimes unforeseen circumstances that preclude our ability to meet those deadlines. Please inform your Instructor of any late submissions, or to seek approval for an extension if needed; refer to the policies for the School of Health & Exercise Sciences (including Self-Declaration policy). With respect to these principles, the following policies apply to these evaluations:

- Assignments will be subject to a late penalty of 5% for the first 24 hours and 10% per day up to 10 days. Assignments submitted after 10 days will be given a grade of zero.
- Regrading marked assignments may only be performed ≤10 days after an assessment has been marked, and a reasonable course of action has been taken (e.g., reviewing rubric, discussed with instructor, reflected on the answers) at which point a third party will mark the assignment.

# Missed exam policy

If students anticipate the need for rescheduling of a midterm ahead of time (for a reason outlined in the SHES polices), they must make a request to their instructor as early as possible ( $\geq 2$  weeks prior). If a midterm is *missed* for medical or other reasons outlined in the SHES policies, students must inform their instructor and request a new date for writing as soon as reasonably possible. The instructor will work with students to determine the best course of action. If students have missed an assessment, it is important to not discuss the missed exam with students who have written the exam, as this constitutes a form of Academic Misconduct. Please note, no re-writes (writing an assessment more than once) will be permitted and requests for moving of a midterm date may or may not be approved. Final exam is addressed below.



# Missed Activity Policy:

Throughout the term, students will be asked to participate as a community of learners, contributing to the ongoing evolution of course material, of peer learning, of interpersonal discourse, peer feedback and group work. While attendance to class/lecture is not required, it is highly recommended to support learning. Alternative supports (re-teaching the lesson) will not typically be permitted and it is the responsibility of students to review missed material and seek guidance from peers, TAs and the instructor. For the final group project, students will be expected to contribute wholly to their groups. It is recommended that clear expectations, roles, schedules and strategies are established within groups in order to support the work and ensure all members are appropriately (peer) evaluated for meeting the expectations. Please work to resolve issues and reach out early if other advice/supports are needed.

# **Generative Artificial Intelligence Use in this Course:**

The use of generative AI tools, including ChatGPT and other similar tools, to complete or support the completion of any form of assignment or assessment in this course is not allowed and would be considered academic misconduct.

# Passing/Grading Criteria

You must achieve an overall grade of at least 50% to pass this course. Individual assessments will have their own grading rubrics and criteria, please ensure you understand their policies through the term.

# **Additional UBC-Okanagan Policies**

# **Policies and Regulations**

Visit UBC Okanagan's Academic Calendar for a list of campus-wide regulations and policies, as well as term dates and deadlines.

# **UBC Values**

UBC creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada, and the world. UBC's core values are excellence, integrity, respect, academic freedom, and accountability.

# **Final Examinations**

You can find the <u>Senate-approved term and examination dates here</u>. 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 <u>http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0</u>

# **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, found in the <u>Academic Calendar</u>.

## Academic Misconduct

The academic enterprise is founded on honesty, civility, and integrity. Violations of academic integrity (i.e., academic 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 may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred for consideration for academic discipline. Careful records are kept to monitor and prevent recurrences. Any instance of cheating or taking credit for someone else's work, whether intentionally or unintentionally, can and often will result in at minimum a grade of zero for the assignment, and these cases will be reported to the Head of the Department and Associate Dean Academic of the Faculty.

# **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 Service Resources**

## Walk-In Well-Being Clinic

The Walk-In Well-Being clinic offers no-fee, brief, single-session psychological services. Sessions are led by a doctoral student in clinical psychology and supervised by a registered psychologist (UBCO Faculty member). Clinicians can provide support with stress management, sleep, self-care, depression, anxiety, interpersonal issues, substance misuse, coping with academic demands/stressors, and provide options for connecting to additional resources. Virtual or in-person sessions are available at the UBCO Psychology Clinic, located in ASC 167 with or without an appointment, on Tuesdays and Thursdays between 10 am and 3 pm from September to June, excluding campus closures. UNC 337 250.807.8421 (ext. 1)

Email: ipc.ok@ubc.ca

Web: https://psych.ok.ubc.ca/psychology-clinic/walk-in-wellness/

## Student Supports, Resources & Campus Services

Visit the Student Support and Resources page to find one-on-one help or explore resources to support your experience at UBC Okanagan, as well as many other campus services available to all students.

## **Advising Options**

Visit the Advising Options page to find out about the variety of advising options available to students including but not limited to academic, career and accessibility.

## **Safewalk**

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

Web: www.security.ok.ubc.ca