THE UNIVERSITY OF BRITISH COLUMBIA

Land Acknowledgement

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

HES 459: Advanced Practice

Faculty: Faculty of Health and Social Development
Department: School of Health and Exercise Sciences
Instructor(s): Shawna Cook (she/her)
Primary contact method: Canvas Message
Instructor(s) Email: shawna.cook@ubc.ca
Duration: Terms 1 Fall 2026
Delivery Modality: In-Person
Course Location: UCHB 109
Course Days: Tuesday's & Thursday's
Class Hours: 8 – 11am
Open Lab Hours: Select Wednesday's 11:45 – 1:30pm
Office hours: Wednesday's 11:00am – 12:30pm – **ART 160**
Office hours are meant for you to come and chat about course content, assignments, or anything I can help you with. I am here to help as much as I can. If you are unavailable during scheduled office hours, please contact me, and we can arrange another time.

Course Description

***Course Overview*:** HES 459 is the capstone practical course in the Clinical Exercise Physiology (CEP) concentration of the BHES program. It is designed as a final skill consolidation and entry-to-practice evaluation for students preparing to enter advanced practicum placements and professional roles in clinical exercise settings.

The course provides hands-on opportunities for students to demonstrate mastery in the assessment, monitoring, prescription, and leadership of clinical exercise services for clients across the chronic disease spectrum. It includes the creation of a personal CEP resource manual and culminates in a comprehensive practical examination.

Course Format

HES 459 is an **integrated, practice-based advanced clinical course** designed to support the transition from classroom learning to clinical practicum. Classes will combine focused instruction, case-based discussion, clinical reasoning activities, patient simulations, hands-on skills practice, and opportunities to integrate assessment, exercise testing, prescription, education, and patient management across a range of clinical contexts.

There is no traditional separation between lecture and laboratory sessions; any class may move between discussion, problem-solving, demonstration, and active clinical practice. Students should therefore **come to every class prepared for physical and clinical activity**, including appropriate clothing and footwear, and be ready to participate in practitioner, patient, and observer roles.

Emphasis will be placed on applying existing knowledge and skills to increasingly complex and uncertain situations, using feedback and repeated practice to develop clinical reasoning, professional judgement, and readiness for independent practicum experiences.

Course Overview, Content and Objectives

This course is an advanced review of knowledge and skills learned through Clinical Exercise Physiology courses. Students will be provided with opportunities to practice these skills independently and/or in groups to support improve their expertise.

The culminating evaluation of this course is a set of assessments designed to allow students the opportunity to demonstrate mastery of CEP knowledge and skills, as an entry-to-practice appraisal necessary to successfully complete in order to move on to the Advanced Community Practicum and ultimately to complete the CEP concentration of the BHES program.

The learning objectives are to:

- Guide students in advanced understanding of the theory and a high level of competence in the skills fundamental in working as a Clinical Exercise Physiologist.
- Assist in students' design of a personal comprehensive resource manual, inclusive of key resources and documents that may support their practice as a CEP in practicum and future professional work.
- Provide opportunities for progressing expertise and demonstrating mastery in health and exercise assessment and monitoring, exercise prescription and program design, exercise training and leadership of individual and group sessions, effective communication and reporting, safety management and professional practice across healthy individuals and those at-risk and living with chronic conditions.
- Evaluate student readiness to practice in a clinical exercise environment with high-risk populations in the Advanced Community Practicum.

Learning Outcomes

Upon successful completion of this course, students will be able to…

1. Demonstrate skill in the safe and effective performance of clinical exercise physiology applications, including health and exercise assessment, results analysis, patient care and monitoring, emergency management, exercise prescription and programming, exercise training and session design, equipment and technical expertise, coaching and exercise counseling, leadership and individual communication.
2. Achieve equivalent standard of competence for qualification as a clinical exercise physiologist
3. Demonstrate a high degree of professionalism and ethical conduct in the delivery of exercise physiology services and patient care
4. Demonstrate the ability to design and modify assessments, exercise prescriptions and training based on patient needs, resource availability and clinical considerations.
5. Demonstrate high level of ability to employ, troubleshoot and maintain important practitioner equipment and design effective resource tools for use with clients and patients.

Assessments of Learning

Assessment	Date	Weight	Learning Outcomes Assessed
ECG Clinical Reasoning Check I	Sept.–Oct.	5%	1, 2, 4, 5
Clinical Performance Assessment I – Initial Patient Assessment & Clinical Decision-Making	Oct. 1–20	5%	1, 2, 3, 4
Applied Knowledge Exam 1	Oct. 22	10%	1, 2, 4
Midterm Practical / Competency Assessment	Oct. 27, 28, 29	20%	1, 2, 3, 4, 5
ECG Clinical Reasoning Check II	Nov.–Dec.	5%	1, 2, 4, 5
Clinical Performance Assessment II – Exercise Intervention & Ongoing Patient Management	Nov. 17–Dec. 3	5%	1, 2, 3, 4, 5
Applied Knowledge Exam 2	Nov. 24	10%	1, 2, 4
Final Practical / Entrustment Assessment	Dec. 8, 9, 10, 11	40%	1, 2, 3, 4, 5
Total		100%	

Course Assessment Details

ECG Clinical Reasoning Checks (10%)

Students will complete two brief individual ECG Clinical Reasoning Checks (5% each) during the term. Students will be provided with an ECG tracing and relevant clinical context and will be asked to interpret

the ECG, identify clinically important findings, and explain the implications for patient assessment, exercise testing, monitoring, or exercise participation. Students may also be asked follow-up questions or provided with additional information requiring them to reconsider or adapt their initial decision. These assessments are designed to evaluate both ECG interpretation and the ability to integrate ECG findings into clinical decision-making.

Clinical Performance Assessments (10%)

Students will complete two Clinical Performance Assessments (5% each) embedded within regular laboratory activities. During these assessments, the instructor will directly observe the student functioning in the practitioner role during a focused patient encounter or clinical task. Students will be evaluated on the relevant clinical competencies as well as their ability to recognize important information, interpret findings, make appropriate decisions, and justify their actions. These are intentionally low-stakes assessments designed to provide individualized feedback, help students calibrate their performance against expected standards, and identify specific areas for deliberate practice before the major practical assessments.

Applied Knowledge Exams (20%)

Two Applied Knowledge Exams (10% each) will be completed during the term. These exams will assess the knowledge required for safe and effective clinical exercise physiology practice, with an emphasis on applying knowledge rather than recalling isolated facts. Questions may use clinical cases, assessment and exercise-testing data, ECG information, medications, clinical conditions, and patient-management scenarios requiring students to interpret information and determine appropriate clinical actions.

Midterm Practical Assessment (20%)

The Midterm Practical Assessment is an individual standardized patient encounter focused primarily on the **initial clinical assessment of a new patient**. Students will be expected to review available clinical information, conduct an appropriate patient interview, complete relevant resting assessments, recognize and interpret clinically important findings, and make safe and appropriate decisions regarding subsequent assessment and exercise participation. Students will also be asked to explain or defend selected decisions to make their clinical reasoning visible. The assessment is designed both to evaluate developing competence and to provide substantive feedback that students can use to guide deliberate practice during the remainder of the term.

Final Practical Assessment (40%)

The Final Practical Assessment is the capstone assessment for HES 459 and is designed to evaluate readiness to progress to supervised clinical practicum. Students will manage a returning clinical patient through a focused reassessment encounter, with emphasis on synthesizing information from the patient and clinical record, assessing current status and readiness for exercise testing, selecting and safely conducting an appropriate fitness or exercise test, monitoring and responding to patient findings, interpreting assessment and test results, and developing an appropriate individualized exercise prescription or program update.

Throughout the encounter, students will be expected to demonstrate safe clinical practice and explain the reasoning underlying important decisions. Standardized clinical information or changes in patient

status may be introduced during the assessment, requiring students to interpret new information and appropriately adapt their management plan. Particular emphasis will be placed on patient safety, exercise testing and monitoring, integration and interpretation of clinical information, clinical reasoning and judgement, and the ability to translate findings into appropriate patient-specific exercise recommendations. As the final practicum-readiness checkpoint in the course, students must demonstrate the required level of competence on this assessment to progress to practicum.

Course Schedule – This course is designed to be adaptable to the learning and needs of the students. This course schedule is a framework but may be altered during the term as required.

Date	Focus	Clinical Context	Assessment / Checkpoint
Sep 8	Course orientation & baseline integration	Multimorbidity: CAD, hypertension & obesity	Formative
Sep 10	Chart review, clinical intake & medications	Post-MI/PCI & cardiovascular risk	Formative
Sep 15	Resting assessment & 12-lead ECG acquisition	CAD & altered resting responses	Formative
Sep 17	ECG interpretation in clinical context	Arrhythmias, conduction & ischemic concerns	Formative
Sep 22	Exercise test selection & pre-test decisions	CAD & heart failure	Formative
Sep 24	ECG reasoning & exercise-testing decisions	ECG findings in exercise assessment	ECG Clinical Reasoning Check I – 5%
Sep 29	Exercise Testing Intensive	Cardiovascular disease & deconditioning	Formative
Oct 1	From exercise-test results to prescription	CAD & diabetes	CPA I begins – 5%
Oct 6	Diabetes & metabolic complexity	T2DM, obesity & neuropathy	CPA I continues
Oct 8	Pulmonary assessment & exercise management	COPD & exertional desaturation	CPA I continues
Oct 13	Oncology rehabilitation	Cancer survivorship, fatigue & cardiotoxicity risk	CPA I continues
Oct 15	Guest Lecture & Peer Coaching	4th-Year CEP workshop for 3rd years	Formative
Oct 20	Neurological & autonomic complexity	MS, stroke & autonomic dysfunction	CPA I completion
Oct 22	Knowledge integration & midterm preparation	Integrated clinical cases	Applied Knowledge Exam 1 – 10%
Oct 27	Midterm Practical Assessment	Standardized new-patient encounter	Midterm Practical – 20%
Oct 29	Midterm Practical Assessment	Standardized new-patient encounter	Midterm Practical – 20%
Nov 3	Midterm feedback & targeted remediation	Individual and common performance gaps	Formative
Nov 5	Clinical deterioration & emergency response	Chest pain, arrhythmia, hypotension, syncope & hypoglycaemia	ECG Clinical Reasoning Check II – 5%
Nov 10 & 12	Reading Break	No classes	—
Nov 17	Functional limitations & long-term management	CKD, osteoarthritis & frailty	CPA II begins – 5%
Nov 19	Program progression, maintenance & documentation	HF/COPD & cardiac rehabilitation	CPA II continues
Nov 24	Knowledge integration	High-complexity integrated cases	Applied Knowledge Exam 2 – 10%
Nov 26	Complex integrated patient management	Cardio-metabolic-pulmonary multimorbidity	CPA II continues
Dec 1	Final practical rehearsal I	Reassessment & exercise testing	CPA II continues
Dec 3	Final practical rehearsal II	Interpretation & program modification	CPA II completion
Dec 8	Practicum readiness consolidation	Cross-condition integrated cases	Formative
Dec 9–22	Final Practical / Entrustment Assessment	Returning patient: reassessment, testing & ongoing management	Final Practical – 40%

Late policy
Flexible late policy - each student receives a bank of 72 hours that can be used for the Reflections. Reminder this is 72 hours total, not per activity. Once the 72 hours is used up the standard late policy applies: 10% per day for a maximum of 3 days after which the grade will be zero.

Missed Practical Assessments Policy
If you are unable to attend an exam, please submit a self-declaration form to the undergraduate coordinator for an accommodation. Once approved a make-up will be scheduled.

Missed Activity Policy:
Lab attendance is mandatory. If you need to miss lab for an exceptional circumstance, please contact the course instructor.

Passing/Grading Criteria
A minimum grade of 50% on the Final Practical Assessment is required to pass the course.

Required Materials
There are **no required textbooks or materials** for this course. Students are encouraged to draw on textbooks, guidelines, course materials, and other resources used throughout the CEP curriculum as needed to support their clinical practice and decision-making. Students are also expected to independently seek out appropriate resources to address identified gaps or reinforce areas requiring further development. This may include reviewing clinical guidelines and reference materials, revisiting foundational concepts, or using supplemental learning resources such as ECG practice tracings or videos. Students should come prepared to identify what they need to know, locate credible information, and apply that information to the clinical cases and practice activities encountered throughout the course.

Other Course Policies

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.

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.

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

may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at http://okanagan.students.ubc.ca/calendar/index.cfm?tree=3,54,111,0.

GenAI usage

The expectations for GenAI use in this course are designed to support your learning. Some activities require you to develop skills through your own practice and process. For these activities, the use of GenAI tools to complete or substantially generate submitted work is not permitted because the learning comes from engaging directly in the process.

Other uses of technology or learning supports may be appropriate where identified. If you are unsure whether a particular use of GenAI is consistent with course expectations, please ask before submitting your work.

Final Examinations

You can find the Senate-approved term and examination dates here. 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

Resources to Support Student Success:

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 on the basis of 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

Office of the Ombudperson

The Office of the Ombudsperson for Students is an independent, confidential and impartial resource to ensure students are treated fairly. The Ombuds Office helps students navigate campus-related fairness concerns. They work with UBC community members individually and at the systemic level to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Ombuds helps students gain clarity on UBC policies and procedures, explore options, identify next steps, recommend resources, plan strategies and receive objective feedback to promote constructive problem solving. If you require assistance, please feel free to reach out for more information or to arrange an appointment.

UNC 328 250.807.9818

Email: ombuds.office.ok@ubc.ca

Web: www.ombudsoffice.ubc.ca

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

The Global Engagement Office

The Global Engagement Office provides advising and resources to assist International students in navigating immigration, health insurance, and settlement matters, as well as opportunities for intercultural learning, and resources for Go Global experiences available to all UBC Okanagan students, and more.

Come and see us – we are here to help! You may also contact geo.ubco@ubc.ca

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.***

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