



KNES-270 – Exercise Testing & Prescription

Health and Human Services

Effective Term & Year: Fall 2026

Course Outline Review Date: 2031-04-01

Program Area: Health

Description:

This course helps to develop theoretical knowledge and practical skills in fitness and lifestyle appraisal and exercise prescription. Students acquire the skills to administer various assessment protocols including those of the Canadian Society for Exercise Physiology – Physical Activity Training for Health (CSEP-PATH). Personalized exercise prescription for various populations following industry standards is emphasized. Students may have the opportunity to become a recognized Certified Personal Trainer (CPT) through CSEP.

Program Information:

This course may be used as an elective in the Kinesiology Diploma Program and may be used as an elective for students in other disciplines.

Delivery Methods: On-campus (Face-to-Face)

Credit Type: College of the Rockies Credits

Credits: 3

Course type/s: Sciences, Social Sciences, Lab Sciences, Kinesiology

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	45
Seminar/Tutorials	
Laboratory/Studio	30

Practicum/Field Experience

Co-op/Work Experience

Other

Total

75

Course Requisites:

- Complete all of the following
 - Completed the following:
 - [KNES110](#) – Foundations of Exercise and Physical Fitness (3)
 - Completed or concurrently enrolled in:
 - [KNES206](#) – Introduction to Exercise Physiology (3)

Prior Learning and Recognition: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to [Policy 2.5.5 Prior Learning Assessment and Recognition \(PLAR\)](#) or contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrollment Service office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date, the following textbooks were in use:

Canadian Society for Exercise Physiology. (2024). *CESP Physical activity training for health (PATH) resource manual* (3rd Ed.). CSEP.

Reading Package- Current journal articles to be chosen by the instructor.

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

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

- assist individuals in adopting and maintaining a physically active lifestyle;
 - conduct assessments and interpret results for health screening, lifestyle appraisal, body composition, aerobic fitness, muscular strength and endurance, muscular balance and posture, flexibility, and power using evidence-based assessment protocols;
 - apply industry standard guidelines to prescribe basic exercise programs to a variety of clients;
 - employ effective counselling and communication skills in exercise prescription;
 - conduct health screening procedures with clients;
 - recognize basic psychological characteristics of clients and basic motivational strategies;
 - apply client-centered coaching and motivational interviewing techniques; and
 - interpret and be familiar with current exercise and fitness research and trends.
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Course Topics:

UNIT OUTLINES:

Unit 1

Introduction to the course

- Introduction to Personal Training Certifying Agencies including CSEP and CFES
- Scope of Practice

Background Information

- Physical Activity and Health, Sedentary Behaviour
- Basic Anatomy and Physiology Specific to Exercise Testing and Prescription
- Basic Nutrition
- Behaviour Change
- Health and Physical Activity Readiness Prescreening Procedures

Unit 2

Assessment

- Organizing and choosing assessment procedures
- Conducting assessment procedures for cardiovascular fitness, muscular strength, muscular endurance, flexibility, muscle imbalances, posture, healthy body composition

Unit 3

A. Exercise Prescription/Training for Health and Fitness

- Setting Priorities and Measurable Objectives
- Client-centered Motivation and Basic Psychological Characteristics
- Matching Components, Methods and Equipment with Clients
- Exercise Analysis and Exercise Design
- Personalized Prescription for Weight Management and Cardiovascular Fitness
- Personalized Prescription for Musculoskeletal Fitness
- Current Research and Trending Exercise Training Methods

B. Exercise Prescription/Training with Additional Considerations

- Performance-related Fitness
- Persons with Disability
- Children and Youth
- Pregnant Women
- Older Adults
- Chronic Conditions

Unit 4

A. Administration, Documentation, Résumé-Writing & Professionalism

See instructor's syllabus for the detailed outline of weekly readings, activities, and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Assignments	25%
Completion of Practical Hours and Assignment	10%
Practical Skills Assessment (Exams)	25%
Midterm	20%
Final Exam	20%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Pass requirements:

An overall average of D (50%) or higher is required to pass this course.

Evaluation Notes: A grade of D (50%) grants credit but may not be sufficient as a prerequisite for sequential courses and/or for transfer to other institutions.

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a "0" on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal
- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)

Equivalent Course(s) and Course Code Changes

Prior Course Code: HKIN 270 >> KNES 270

Date changed: September 2012

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational,

employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.