Exercise Testing & Prescription – KNES 270  
Kinesiology Program

Course Outline

GENERAL COURSE DESCRIPTION:

This course helps to develop theoretical knowledge and practical skills in fitness and lifestyle appraisal and exercise prescription. Students should 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: This course is delivered face to face.

COTR Credits: 3

Hours for this course: 75 hours

Typical Structure of Instructional Hours:

<table>
<thead>
<tr>
<th>Instructional Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Hours</td>
<td>45</td>
</tr>
<tr>
<td>Seminars / Tutorials</td>
<td></td>
</tr>
<tr>
<td>Laboratory / Studio Hours</td>
<td>30</td>
</tr>
<tr>
<td>Practicum / Field Experience Hours</td>
<td></td>
</tr>
<tr>
<td>Other Contact Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>

Practicum Hours (if applicable):

<table>
<thead>
<tr>
<th>Type of Practicum</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-the-job Experience</td>
<td>N/A</td>
</tr>
<tr>
<td>Formal Work Experience</td>
<td>N/A</td>
</tr>
<tr>
<td>Other *</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

* The student is required to complete 15 hours of personal training & exercise prescription, or other related practical hours
APPROVAL SIGNATURES:

Acting Department Head
Sandi Hill
E-mail: shill@cotr.bc.ca

Acting Dean of Health and Human Services
Norma Sherret
E-mail: nsherret@cotr.bc.ca

EDCO

Valid from: September 2018 – March 2023

COURSE PREREQUISITES AND TRANSFER CREDIT:

Prerequisites: Requires KNES 154 with a minimum grade of C- (55%) and KNES 206 with a minimum grade of C- (55%)

Corequisites: None

Flexible Assessment (FA):

Credit can be awarded for this course through FA ☑ Yes ☐ No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit: For transfer information within British Columbia, Alberta and other institutions, please visit http://www.cotr.bc.ca/Transfer.

Students should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number: HKIN 270 ⇔ KNES 270

Date changed: September 2012
Textbooks and Required 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:

CESP PATH - *Physical Activity Training for Health* (2013). Canadian Society for Exercise Physiology

*Reading Package* - Current journal articles to be chosen by the Instructor

Please see the instructor’s syllabus or check COTR’s online text calculator [http://www.cotr.bc.ca/bookstore/cotr_web.asp?IDNumber=164](http://www.cotr.bc.ca/bookstore/cotr_web.asp?IDNumber=164) for a complete list of the currently required textbooks.

LEARNING OUTCOMES:

Upon the successful completion of this course, students should 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.

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 ASSESSMENT:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>% Of Total Grade</th>
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</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>35%</td>
</tr>
<tr>
<td>Completion of Practical Hours and Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Practical Skills Assessment (Exam)</td>
<td>15%</td>
</tr>
<tr>
<td>Midterm</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Please see the instructor’s syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments, and use of electronic aids.
EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of “0” for the exam.

COURSE GRADE:

Course grades are assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark</td>
<td>≥ 90</td>
<td>89-85</td>
<td>84-80</td>
<td>79-76</td>
<td>75-72</td>
<td>71-68</td>
<td>67-64</td>
<td>63-60</td>
<td>59-55</td>
<td>54-50</td>
<td>&lt; 50</td>
</tr>
</tbody>
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A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

ACADEMIC POLICIES:

See [www.cotr.bc.ca/policies](http://www.cotr.bc.ca/policies) for general college policies related to course activities, including grade appeals, cheating, and plagiarism.

COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.