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THE GOLD STANDARD IN EXERCISE SCIENCE AND PERSONAL TRAINING

CSEP Clinical Exercise Physiologist™ Recommended Course Map

University of Calgary

Approved CSEP Recommended Course Maps identify courses recognized by CSEP as satisfying the associated core competency area. Courses not listed in this Recommended Course Map may still satisfy the associated core competency area upon review by CSEP. Candidates must meet all requirements including coursework to be approved to challenge exams.

CORE COMPETENCIES	COURSE CODE	COURSE TITLE
1. Anatomy, Biomechanics, and Exercise Physiology • Functional anatomy, biomechanics, and exercise physiology as it applies to fitness assessment, exercise prescription, demonstration of exercise, and exercise education of the client(s) related to physical activity/exercise, fitness, and health. • Exercise physiology and its application to submaximal and maximal exercise, acute bouts of exercise and chronic exercise (training) for both men and women of all ages. • The impact of physical activity and exercise training on all of the body system.	All: KNES 259 KNES 260 KNES 263 KNES 373	 Human Anatomy and Physiology I Human Anatomy and Physiology II Quantitative Biomechanics Exercise Physiology
2. Health Behaviour Change and Education • Health and exercise psychology and behavior change theory and application. • Client education in areas of nutrition and weight management, sleep, sedentary behaviour.	KNES 337 KNES 397 KNES 399 or KNES 413	Introduction to Nutrition Health and Exercise Psychology Sport Psychology Motivation in Physical Activity, Exercise & Sport
3. Client Pre-participation Screening (& pharmacology) • Proper use of pre-screening tools and the ability to gather client subjective history • Describe the effect of common medications on rest and exercising responses	KNES 375 KNES 479 KNES 433	Tests and Measurements in Kinesiology Advanced Fitness Appraisal and Exercise Prescription Health and Physical Activity
4. Advanced Exercise & Health Assessment for Apparently Healthy Populations • Develop and select appropriate assessments and implement valid reliable testing protocols. Apply fitness assessment outcomes and fitness assessment normative data accurately and appropriately.	KNES 479	Advanced Fitness Appraisal and Exercise Prescription
5. Advanced Exercise & Health Assessment for Chronic Conditions • Develop and select appropriate assessments and implement valid reliable testing protocols for clinical population. • Apply fitness assessment outcomes and fitness assessment normative data accurately and appropriately for clinical populations.	KNES 495 or KNES 497 or KNES 505 or KNES 433	Physiological Aspects of Aging, Disease and Physical Activity Cancer and Exercise Research and Reviews Concussion Health and Physical Activity
6. Advanced Exercise Prescription for Apparently Healthy Populations • Development and design of appropriate exercise prescriptions that fulfill different needs of the individual (health-related fitness program). • Application of appropriate training principles and lifestyle interventions to enhance aerobic fitness, anaerobic fitness, musculoskeletal fitness, balance, flexibility and a healthy body composition. • Demonstration of exercises and the use of exercise equipment. • Monitoring activity and providing appropriate progression.	KNES 479	Advanced Fitness Appraisal and Exercise Prescription
7. Advanced Exercise Prescription for Chronic Conditions • Development and design of appropriate exercise prescriptions that fulfill different needs of the individual (health-related fitness program). • Application of appropriate training principles and lifestyle interventions to enhance aerobic fitness, anaerobic fitness, musculoskeletal fitness, balance, flexibility and a healthy body composition. • Demonstration of exercises and the use of exercise equipment. • Monitoring activity and providing appropriate progression. • Knowledge of the physiology, pathophysiology, clinical management, contraindications, precautions and exercise modifications for the following; Cardiopulmonary, metabolic, pulmonary, musculoskeletal, neurological, cancer, musculoskeletal injuries, and mental health.	KNES 495 or KNES 497 or KNES 505	Physiological Aspects of Aging, Disease and Physical Activity Cancer and Exercise Research and Reviews Concussion
8. Professional and Ethical Practice • Program Administration, including effective communication (oral and written). • Statistics and Research Methodologies in Health and Fitness. • Professional Ethics.	KNES 375 KNES 479 or STAT 205 or STAT 213	Tests and Measurements in Kines. Advanced Fitness Appraisal and Exercise Prescription Introduction to Statistical Inquiry Introduction to Statistics I
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