CSEP-Clinical Exercise Physiologist Core Competencies

1. Anatomy, Biomechanics, and Exercise Physiology
   a. 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.
   b. 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.
   c. The impact of physical activity and exercise training on all of the body systems.

2. Health Behaviour Change and Education
   a. Health and exercise psychology and behavior change theory and application.
   b. Client education in areas of nutrition and weight management, sleep, sedentary behaviour.

3. Client Pre-participation Screening (& pharmacology)
   a. Proper use of pre-screening tools and the ability to gather client subjective history
   b. Describe the effect of common medications on rest and exercising responses

4. Advanced Exercise & Health Assessment for Apparently Healthy Populations
   a. Develop and select appropriate assessments and implement valid reliable testing protocols.
   b. Apply fitness assessment outcomes and fitness assessment normative data accurately and appropriately.

5. Advanced Exercise & Health Assessment for Chronic Conditions
   a. Develop and select appropriate assessments and implement valid reliable testing protocols for clinical population.
   b. Apply fitness assessment outcomes and fitness assessment normative data accurately and appropriately for clinical populations.

6. Advanced Exercise Prescription for Apparently Healthy Populations
   a. Development and design of appropriate exercise prescriptions that fulfill different needs of the individual (health-related fitness program).
   b. Application of appropriate training principles and lifestyle interventions to enhance aerobic fitness, anaerobic fitness, musculoskeletal fitness, balance, flexibility and a healthy body composition.
   c. Demonstration of exercises and the use of exercise equipment.
   d. Monitoring activity and providing appropriate progression.

7. Advanced Exercise Prescription for Chronic Conditions
   a. Development and design of appropriate exercise prescriptions that fulfill different needs of the individual (health-related fitness program).
b. Application of appropriate training principles and lifestyle interventions to enhance aerobic fitness, anaerobic fitness, musculoskeletal fitness, balance, flexibility and a healthy body composition.

c. Demonstration of exercises and the use of exercise equipment.

d. Monitoring activity and providing appropriate progression.

e. 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.

8. Professional and Ethical Practice
   a. Program Administration, including effective communication (oral and written).
   b. Statistics and Research Methodologies in Health and Fitness.
   c. Professional Ethics.