

Diploma in Sport and Exercise Sciences

Module Outlines

Academic Reading and Writing 2

This module is designed to train students in their reading and writing skills, allowing them to understand their subjects better and effectively engage in class activities. This is an intermediate module, progressed from the introductory module taken during Certificate in Sport and Exercise Sciences. The classes will address a variety of key demands such as writing and reading assignments with focus on academic skills, language skills and writing abilities.

Biomechanics of Sport and Exercise

This module introduces students to biomechanics and how it is applied to sport and exercise settings. The topics will focus on practical concepts such as external forces and their effects, how the body generates forces to maintain position, and how forces create movement in physical activities. In addition, emphasis will also be given to help students apply biomechanical principles to improve sports techniques, exercise training, and injury prevention.

Functional Anatomy

This module is designed to introduce the structures of human anatomy and explain how these structures are involved in human movement. Topics covered will include bones, ligaments, muscles, joints, blood vessels and nerves of the human body. Students also gain from having hands-on experiences performed on themselves or a partner to enhance the learning and understanding of human anatomy.

Methods of Group Exercise Instruction

This module provides students with content knowledge and practical experience concerned with teaching and evaluating group exercise classes. A variety of group exercise classes will also be conducted. The module also has a practical component where students will design and lead a group exercise class.

Physiology of Sport and Exercise

This module introduces students to the physiological responses associated with sport and exercise participation. The topics covered include exercising muscles, cardiovascular and respiratory function, exercise training, environmental influences on performance, performance optimisation, and age and sex considerations in sport and exercise.

Principles of Weight Training

This module provides students with a comprehensive coverage of weight training exercises for the upper and lower body, using free weights and machines. It provides coverage on proper technique and performance through analysing movements, detailing safety precautions, and identifying common errors. The module also has a practical component where students will design and implement a weight training programme in the gym.

Professional Studies

This module aims to survey the professional field of sport and leisure. Students will get the opportunity to analyse the nature and importance of physical activity, the knowledge base within the professional field, and careers in physical activity professions (e.g., sport, exercise, fitness, physical education, coaching, and management). Focus will also be placed on the integrative nature of the sports professional field.

Sport and Exercise Nutrition

This module aims to present the principles, background, and rationale for present nutrition guidelines specifically for athletes and exercise participants. Using a physiological basis, the module provides an in-depth look at the science behind sport nutrition. Students will gain a comprehensive understanding of nutrition related to sport and the influence of nutrition on exercise performance, training and recovery.

Sport and Exercise Psychology

This module examines psychological theories and research related to sport and exercise behaviour. The module is designed to introduce to students the field of sport and exercise psychology by providing a broad overview of the major topics in the area. The topics covered include personality, motivation, group cohesion, psychological skills training methods, exercise behaviour, psychology of injury, burnout and overtraining.