

# Physical Education

## Units 1-2

This subject introduces students to an understanding of physical activity involving the relationship between body systems, analysis of factors that influence physical performance and involvement in physical activity. This subject is 60% theory and 40% practical work.

### UNIT 1

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity. Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

#### LEARNING ACTIVITIES

Practical laboratory reports, practical activity classes, written reports, data analysis exercises and participation in and evaluation of practical classes via a reflective folio/diary.

#### KEY SKILLS REQUIRED

Observation and involvement in classroom activities, ability to write laboratory reports, data analysis, research skills, ability to participate in and evaluate practical classes via individual and group work, general ICT skills and note taking.

#### ASSESSED TASKS

Practical laboratory reports, written reports, tests, case study analysis and a mid-year examination.

### UNIT 2

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity. Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

#### LEARNING ACTIVITIES

Laboratory classes and reports, data analysis exercises and participation in and evaluation of practical classes via a critically reflective folio/diary.

#### KEY SKILLS REQUIRED

Observation and involvement in classroom activities, ability to write laboratory reports, data analysis, research skills, ability to participate in and evaluate practical classes via individual and group work, general ICT skills and note taking.

#### ASSESSED TASKS

Test, case study analysis, practical laboratory report, written reports and an end of semester written examination.

# Physical Education

## Units 3-4

This subject introduces students to an understanding of physical activity and sedentary behaviour from a participatory and physiological perspective. Students analyse data in relation to the National Physical Activity Guidelines and apply the social-ecological model to a range of physical activities. Students study physical fitness, the definitions, components and the relationship to energy systems and recognise how fitness components are used in various sports. This subject is 60% theory and 40% practical.

### UNIT 3

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport. Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

#### LEARNING ACTIVITIES

Summaries, laboratory reports, case studies and structured questions.

#### KEY SKILLS REQUIRED

Describe, identify, collect, analyse and interpret data, complete laboratory reports, analyse and evaluate information collected, apply theory to practical situations and participate in practical classes.

#### ASSESSED TASKS

Written reports, practical laboratory report and tests.

### UNIT 4

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program. Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective.

#### LEARNING ACTIVITIES

Summaries, laboratory reports, case studies and structured questions.

#### KEY SKILLS REQUIRED

Describe, identify, collect, analyse and interpret data, complete laboratory reports, report on, analyse and evaluate information collected, apply theory to practical situations and participate in practical classes.

#### ASSESSED TASKS

Written reports, practical laboratory report, tests and an end of year written examination.

#### VCAA ASSESSMENT – The overall Study Score will consist of:

School Assessed Coursework Unit 3 (25%), School Assessed Coursework Unit 4 (25%), a 2 hour written examination in November (50%).