

# **VCE PHYSICAL EDUCATION** INFORMATION GUIDE



# **VCE PHYSICAL EDUCATION**

#### RATIONALE

The study of VCE Physical Education enables students to integrate a contemporary understanding of the theoretical concepts of physical activity with practical application. This develops the knowledge and skills required to critically evaluate influences that affect their own and others' participation and performance in movement.

#### **UNIT 1 - THE HUMAN BODY IN MOTION**

#### Area of Study 1

## How does the musculoskeletal system work to produce movement?

In this area of study, students examine the muscular and skeletal systems of the human body and how the muscles and bones work together to produce movement. Through practical activities, they explore, from a biophysical perspective, the major components of the musculoskeletal system and its contributions and interactions during physical activity, sport and exercise.

Possible causes of illness and injury to the musculoskeletal system are investigated. Strategies and aids to assist in the prevention and management of such conditions are also explored. Students consider a variety of permitted and prohibited substances and methods used to enhance performance of the musculoskeletal system.

#### Area of Study 2

#### What role does the cardiorespiratory system play in movement?

In this area of study, students investigate the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Through practical activities, students explore the structures and function of the cardiorespiratory system and the contributions and interactions of each system during physical activity, sport and exercise at various intensities. The impacts of regular aerobic exercise on the functioning of these systems are also examined. Students consider a variety of permitted and prohibited substances and methods used to enhance performance of the cardiorespiratory system. They also explore the ethical and sociocultural considerations of using permitted and prohibited performance-enhancing substances and methods.



## UNIT 2 - PHYSICAL ACTIVITY, SPORT AND SOCIETY

#### Area of Study 1

## How do physical activity, sport and exercise contribute to healthy lifestyles?

In this area of study, students focus on the role of physical activity, sport and exercise in developing and promoting healthy lifestyles across the lifespan. Students explore the sociocultural influences on participation in various forms of physical activity. They investigate the physical, social, mental, emotional and spiritual benefits of participation in regular physical activity at the individual and population levels, and the potential health risks associated with physical inactivity and sedentary behaviour.

Students examine sociocultural factors that influence physical activity and consider opportunities and barriers to participation. They develop an understanding of the use of subjective and objective methods for assessing physical activity and sedentary behaviour at the individual and population levels and compare these to physical activity and sedentary behaviour guidelines. Students identify and describe the components of the socialecological model to assist in the critique and creation of strategies aimed at increasing physical activity and/or reducing sedentary behaviour within a given population. Students conduct a Functional Movement Assessment (FMA), then design and implement a personalised plan that is sustainable and adheres to the physical activity and sedentary behaviour guidelines.

#### Area of Study 2

## What are the contemporary issues associated with physical activity and sport?

In this area of study, students focus on a range of contemporary issues associated with physical activity and sport at the local, national and global levels.

They investigate a range of intrapersonal and interpersonal factors that affect access to, and inclusion, participation and performance in, physical activity and sport, such as injuries, coaching, sports technology and the media, psychological strategies and equity for a range of population groups, including Aboriginal and Torres Strait Islander Peoples.

Students explore one contemporary issue relevant to physical activity and/or sport and prescribe and participate in practical activities to highlight the issue.

Students develop an understanding of the historical and current perspectives on the issue and forecast future trends. They form conclusions about the impacts these issues have on physical activity and sport in society.

# **INFORMATION GUIDE**

#### **CAREER OPTIONS**

- Coach
- Fitness Instructor
- Health Worker
- Physiotherapist
- Psychologist
- Recreational Officer

#### UNIT 3 - MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY

#### Area of Study 1

#### How are movement skills improved?

In this area of study, students examine the biomechanical and skill-acquisition principles that can be applied when analysing and improving movement skills for participation and performance.

Through practical activities, students explore and analyse their own movement and use coaching to investigate factors that influence skill acquisition. They develop an understanding of how appropriately applying biomechanical and skill-acquisition principles leads to the development of optimal movement patterns to enhance participation and performance.

#### Area of Study 2

#### How does the body produce energy?

In this area of study, students explore the various systems and mechanisms associated with the production of energy required for human movement. They consider the cardiovascular, respiratory and muscular systems and the roles of each in supplying oxygen to, and creating energy at, the working muscles. They examine the ways in which energy for movement is produced by the 3 energy systems and the associated fuels used for physical activity, sport and exercise of varying intensity and duration. Students also consider the many factors contributing to fatigue, nutritional tools to delay fatigue and recovery strategies used to optimise the return to pre-exercise conditions. Through practical activities, students explore the interplay of the energy systems during physical activity, sport and exercise.



### Sports Scientist

Sports Administrator

#### **UNIT 4 - TRAINING TO IMPROVE PERFORMANCE**

Sports Analyst

#### Area of Study 1

#### What are the foundations of an effective training program?

In this area of study, students analyse the information required to form the foundation of an effective training program. Through participation, they undertake and collect data from an activity analysis and justify the specific physiological requirements of an activity.

Students determine the relevant factors that affect each of the fitness components and conduct an assessment of fitness that demonstrates correct and appropriate implementation of testing protocols and procedures and informs the design of the training program.

#### Area of Study 2

#### How is training implemented effectively to improve fitness?

In this area of study, students focus on participation, implementation and evaluation of training principles and methods from practical and theoretical perspectives. They consider the ways in which fitness can be improved by applying appropriate training principles and methods when designing and critiquing a training program. Students identify and consider components of an exercise training session, and they record and analyse relevant data that can be used to adjust training. Students explain the chronic adaptations of the cardiovascular, respiratory and muscular systems that improve fitness and enhance performance.

#### Area of Study 3

#### Integrated movement experiences

In this area of study, students reflect on their participation in a practical activity and use primary data collected to demonstrate their integration of theory and practice across Units 3 and 4. Using an interdisciplinary approach, students are required to analyse the interrelationships between skill acquisition, biomechanics, energy production and training, and the impacts these have on performance. To find out more information about VCE Physical Education at Kilbreda College, please contact:

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This flyer is correct as of July 2024, however may be subject to change.

