Personal Development, Health and Physical Education

Stage 6 Syllabus
1 The Higher School Certificate Program of Study

The purpose of the Higher School Certificate program of study is to:

- provide a curriculum structure which encourages students to complete secondary education;

- foster the intellectual, social and moral development of students, in particular developing their:
  - knowledge, skills, understanding and attitudes in the fields of study they choose
  - capacity to manage their own learning
  - desire to continue learning in formal or informal settings after school
  - capacity to work together with others
  - respect for the cultural diversity of Australian society;

- provide a flexible structure within which students can prepare for:
  - further education and training
  - employment
  - full and active participation as citizens;

- provide formal assessment and certification of students’ achievements;

- provide a context within which schools also have the opportunity to foster students’ physical and spiritual development.
2 Rationale for PDHPE in the Stage 6 Curriculum

Personal Development, Health and Physical Education (PDHPE) is an integrated area of study that provides for the intellectual, social, emotional, physical and spiritual development of students. It involves students learning about and practising ways of maintaining active, healthy lifestyles and improving their health status. It is also concerned with social and scientific understandings about movement, which lead to enhanced movement potential and appreciation of movement in their lives.

Young people are growing up in a world of rapid change. Expanding technologies, new social structures, shifting community values and emerging environmental issues are complex interrelated factors that affect the way individuals live their lives. At a time when there is tremendous opportunity for good health there are numerous conflicting influences on lifestyle.

It should be a goal of every individual to lead a fulfilled life that is active and healthy. Furthermore, it is desirable to be a part of a society that promotes this as a key value and supports its members in leading healthy lifestyles.

In order for students to enhance personal growth and to make a significant contribution to the wellbeing of others, this syllabus focuses on the health of individuals and communities and the factors that influence movement skill and physical activity levels.

This syllabus focuses on a social view of health where the principles of diversity, social justice and supportive environments are fundamental aspects of health. The examination of individual, family and community values and beliefs and the sociocultural and physical environments in which we live provides an explanation for health status and sustainable solutions for better health.

The Ottawa Charter for Health Promotion is introduced as an important concept for exploring health issues. It provides a framework where enabling, mediating and advocating for health is acted upon through the key strategies of:

- building healthy public policy
- strengthening community action
- creating supportive environments
- developing personal skills
- reorienting health services.

The health promotion model is applied to specific study of national health priority areas and issues related to equity and health. It also enables students to investigate areas of great relevance, including the health of young people and the analysis of personal health.
This syllabus also includes a detailed study of movement and physical activity. The emphasis is on understanding how the body moves and the sociocultural influences that regulate movement. Scientific aspects to be studied include anatomy, physiology, biomechanics and skill acquisition. Students also think critically about aspects of history, economics, gender and media as they impact on patterns of participation in physical activity and the ways that movement is valued. These areas of study prepare students to be informed participants in movement culture, skilled, intelligent performers and analysts of movement.

As students are confronted by particular PDHPE issues, they are challenged to examine them in socially imaginative ways and respond in terms of individual plans, lifestyle decisions and clarification of values. The syllabus gives emphasis to the development of those skills that enable students to translate knowledge and understanding and beliefs into action. This includes the ability to:

- research, inquire and question in order to facilitate transfer of learning in a changing society
- define issues, identify and consider outcomes of possible solutions
- choose, implement and evaluate courses of action
- resolve conflict, assert rights and access social support.

The syllabus has been designed for all students in Years 11 and 12 who have an interest in this area. While there are no formal prerequisites for this course, it is assumed that students have undertaken a minimum 300 hour course based on the PDHPE Years 7–10 Syllabus. The Stage 6 PDHPE syllabus builds upon this experience by introducing students to more detailed study and higher order skills.

All aspects of PDHPE are of relevance to all young people and, as such, the syllabus prescribes a core of study that represents the breadth of the learning area. It is acknowledged, however, that senior students will have particular areas of interest that they wish to pursue in greater depth. Consequently, the syllabus offers a significant options component designed to enable students to specialise in chosen areas.

The syllabus provides a direct link with study and vocational pathways in the areas of recreational, paramedical, movement and health sciences. Related career opportunities are expanding and gaining recognition throughout the community as legitimate fields of endeavour.

The study of PDHPE also supports students as they develop into young adults. The syllabus encourages personal growth, the enhancement of wellbeing and the development of the individual’s capacity to take a productive role in society.
3 Continuum of Learning for PDHPE Stage 6 Students

Stages 1–3
PDHPE Years K–6

Stages 4–5
PDHPE Years 7–10

Stage 5
PDHPE Generic
Life Skills Course
(for students with special education needs)

Stage 6
Stage 6 PDHPE Life Skills Course
(for students with special education needs)

Stage 6 PDHPE Years 11–12

Workplace University TAFE Other
4 Aim

The aim of PDHPE at Stage 6 is to develop in each student a capacity to think critically about key issues related to health and physical activity in order to make informed decisions that support and contribute to healthy, active lifestyles and communities.

5 Objectives

Through the study of PDHPE, students will develop:

- values and attitudes that promote healthy and active lifestyles and communities
- knowledge and understanding of the factors that affect health
- a capacity to exercise influence over personal and community health outcomes
- knowledge and understanding about the way the body moves
- an ability to take action to improve participation and performance in physical activity
- an ability to apply the skills of critical thinking, research and analysis.
6 Course Structure

6.1 Overview of Course

The PDHPE Syllabus includes two 120 hour courses.

The Preliminary course consists of two core modules representing 60% of course time. An options component representing 40% of course time includes four options of which students are to study two.

The HSC course consists of two core modules representing 60% of course time. An options component representing 40% of course time includes five options of which students are to study two.

<table>
<thead>
<tr>
<th>Preliminary Course</th>
<th>HSC Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Strands (60% total)</strong></td>
<td><strong>Core Strands (60% total)</strong></td>
</tr>
<tr>
<td>• Better Health for Individuals (30%)</td>
<td>• Health Priorities in Australia (30%)</td>
</tr>
<tr>
<td>• The Body in Motion (30%)</td>
<td>• Factors Affecting Performance (30%)</td>
</tr>
<tr>
<td><strong>Options (40% total)</strong></td>
<td><strong>Options (40% total)</strong></td>
</tr>
<tr>
<td>Select two of the following options:</td>
<td>Select two of the following options:</td>
</tr>
<tr>
<td>• First Aid (20%)</td>
<td>• The Health of Young People (20%)</td>
</tr>
<tr>
<td>• Composition and Performance (20%)</td>
<td>• Sport and Physical Activity in Australian Society (20%)</td>
</tr>
<tr>
<td>• Fitness Choices (20%)</td>
<td>• Sports Medicine (20%)</td>
</tr>
<tr>
<td>• Outdoor Recreation (20%)</td>
<td>• Improving Performance (20%)</td>
</tr>
<tr>
<td></td>
<td>• Equity and Health (20%)</td>
</tr>
</tbody>
</table>
6.2 Module Structure

Each module has a common format, the features of which are described below.

**Core or Option Number and Title**
The module title and the percentage of course time is indicated.

**Description**
This section provides a general overview and introduction to each module. It introduces focus questions that give an overall direction for critical inquiry of the areas of study.

**Outcomes**
The course outcomes that students work towards in the context of the module are listed.

**Students learn about...**
This section details the subject matter to be covered in the module. It describes what students learn about. All aspects identified in this section are to be studied.

Focus questions indicate the critical aspects to be studied and the associated subject matter describes the scope of the investigation.

**Students learn to...**
This section describes what students learn to do as a result of engaging with the subject matter.

It is expected that students will have experience of all aspects identified. They emphasise practical applications, research, critical inquiry and movement opportunities.

**Teacher note**
This section clarifies the depth of coverage required for particular areas of study. They also indicate aspects of the subject matter that require a particular emphasis.

**Suggested Assessment Strategies**
This section provides examples of assessment strategies appropriate for assessing the relevant syllabus outcomes.
6.3 Important Aspects of Course Methodology

The process of critical inquiry and the use of practical application enhance learning, increase relevance and support further independent investigation of topics.

**Critical Inquiry**
Understanding about health and movement is dynamic. Consequently, students need to question current understanding, examine issues from a range of perspectives and be prepared to evaluate beliefs and opinions over time.

In order to support the process of critical inquiry, the syllabus specifies focus questions. Following is a general framework that may assist students to explore these focus questions. Other specific examples of the critical inquiry process are presented within modules in the section *Students will learn to* as follows:

- **Exploring the Issue**
  - How important is the issue as perceived by different groups?
  - Is the issue a new or emerging concern?
  - Are there inequities and social justice considerations associated with the issue?
  - What are the factors that influence the issue?
  - What action has been taken to date in relation to the issue?
  - What are the range of approaches that could be adopted?
  - Are there similar case studies from which we can learn?

- **Planning for Action**
  - What change do you perceive as possible?
  - How can this change best be put in place?
  - Is change justified?
  - What effect might change have on stakeholders?
  - What aspects of the Ottawa Charter lend themselves to addressing this issue?

- **Reflecting on the Issue**
  - How do approaches to this issue stand up to ethical scrutiny?
  - What is the future view of this issue?
  - How does my understanding of this issue and the skills involved in dealing with it transfer to other areas of study?
  - How has the inquiry affected my actions, values and attitudes?
  - What was the outcome of any plans that were implemented?

**Practical Application**
Learning becomes meaningful when students have the opportunity to apply their understanding to contexts that are personally relevant. Student’s research and investigation should focus on those issues that are of greatest interest. Where possible, students should apply their learning to action in response to local needs.
Practical application enables students to acquire knowledge, understanding, values, attitudes and skills through experiential learning. This process also provides opportunity for translating theoretical understanding into action.

In the case of physical performances, the emphasis should be on acquiring and demonstrating understanding. While the attainment of a high level of movement skill is desirable, the focus of this syllabus is on the capacity to apply understanding about movement and to acquire understanding through movement.

Within each module a range of practical applications are provided in the ‘Students learn to’ section, including:

- gathering relevant information, which may involve surveys, interviews and accessing computer data bases
- conducting practical laboratories to determine physiological response to exercise and training
- presenting peer coaching workshops to examine skill acquisition processes
- maintaining personal journals or diaries in order to monitor progress towards goals or to reflect on health issues.
## 7 Objectives and Outcomes

### 7.1 Table of Objectives and Outcomes

<table>
<thead>
<tr>
<th>Values and Attitudes Objective</th>
<th>Values and Attitudes Outcomes for Preliminary and HSC Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student develops:</td>
<td>A student:</td>
</tr>
<tr>
<td>• values and attitudes that</td>
<td>• demonstrates a commitment to social justice through valuing</td>
</tr>
<tr>
<td>promote healthy active</td>
<td>diversity, equity and supportive environments</td>
</tr>
<tr>
<td>lifestyles and communities</td>
<td>• shows responsibility and a willingness to act for personal</td>
</tr>
<tr>
<td></td>
<td>and community health</td>
</tr>
<tr>
<td></td>
<td>• shows a willingness to question issues that impact on health</td>
</tr>
<tr>
<td></td>
<td>and performance</td>
</tr>
<tr>
<td></td>
<td>• values the technical and aesthetic qualities of and</td>
</tr>
<tr>
<td></td>
<td>participation in physical activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Preliminary Course Outcomes</th>
<th>HSC Course Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>develops:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• knowledge and understanding</td>
<td>P1 identifies and examines why individuals give different meanings to health</td>
<td>H1 describes the nature and justifies the choice of Australia’s health priorities</td>
</tr>
<tr>
<td>of the factors that affect health</td>
<td>P2 explains how a range of health behaviours affect an individual’s health</td>
<td>H2 analyses and explains the health status of Australians in terms of current trends and groups most at risk</td>
</tr>
<tr>
<td></td>
<td>P3 describes how an individual’s health is determined by a range of factors</td>
<td>H3 analyses the determinants of health and health inequities</td>
</tr>
<tr>
<td>• a capacity to exercise</td>
<td>P4 evaluates aspects of health over which individuals can exert some control</td>
<td>H4 argues the case for health promotion based on the Ottawa Charter</td>
</tr>
<tr>
<td>influence over personal and community health outcomes</td>
<td>P5 describes factors that contribute to effective health promotion</td>
<td>H5 explains the different roles and responsibilities of individuals, communities and governments in addressing Australia’s health priorities</td>
</tr>
<tr>
<td></td>
<td>P6 proposes actions that can improve and maintain an individual’s health</td>
<td>H6 demonstrates a range of personal health skills that enables them to promote and maintain health (Option 1)</td>
</tr>
<tr>
<td>Objectives</td>
<td>Preliminary Course Outcomes</td>
<td>HSC Course Outcomes</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• knowledge and understanding about the way the body moves</td>
<td>P7 explains how body systems influence the way the body moves</td>
<td>H7 explains the relationship between physiology and movement potential</td>
</tr>
<tr>
<td></td>
<td>P8 describes the components of physical fitness and explains how they are monitored</td>
<td>H8 explains how a variety of training approaches and other interventions enhance performance and safety in physical activity</td>
</tr>
<tr>
<td></td>
<td>P9 describes biomechanical factors that influence the efficiency of the body in motion</td>
<td>H9 explains how movement skill is acquired and appraised</td>
</tr>
<tr>
<td>• an ability to take action to improve participation and performance in physical activity</td>
<td>P10 plans for participation in physical activity to satisfy a range of individual needs</td>
<td>H10 designs and implements training plans to improve performance</td>
</tr>
<tr>
<td></td>
<td>P11 assesses and monitors physical fitness levels and physical activity patterns</td>
<td>H11 designs psychological strategies and nutritional plans in response to individual performance needs</td>
</tr>
<tr>
<td></td>
<td>P12 demonstrates strategies for the assessment, management and prevention of injuries in first aid settings</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>H12 analyses the influence of sociocultural factors on the way people participate in and value physical activity and sport (Option 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P13 develops, refines and performs movement compositions in order to achieve a specific purpose (Option 2)</td>
<td>H13 selects and applies strategies for the management of injuries and the promotion of safety in sport and physical activity (Option 3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P14 demonstrates the technical and interpersonal skills necessary to participate safely in challenging outdoor recreation activities (Option 4)</td>
<td></td>
</tr>
<tr>
<td>Objectives</td>
<td>Preliminary Course Outcomes</td>
<td>HSC Course Outcomes</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>• an ability to apply the skills of critical thinking, research and analysis</td>
<td>P15 forms opinions about health-promoting actions based on a critical examination of relevant information</td>
<td>H14 argues the benefits of health-promoting actions and choices that promote social justice</td>
</tr>
<tr>
<td></td>
<td>P16 uses a range of sources to draw conclusions about health and physical activity concepts</td>
<td>H15 critically analyses key issues affecting the health of Australians and proposes ways of working towards better health for all</td>
</tr>
<tr>
<td></td>
<td>P17 analyses factors influencing movement and patterns of participation</td>
<td>H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H17 selects appropriate options and formulates strategies based on a critical analysis of the factors that affect performance and safe participation</td>
</tr>
</tbody>
</table>
7.2 Key Competencies

PDHPE Stage 6 provides a context within which to develop general competencies considered essential for the acquisition of effective, higher order thinking skills necessary for further education, work and productive functioning in daily life.

The following key competencies are embedded in the PDHPE Stage 6 Syllabus to enhance student learning.

**Collecting, analysing and organising information**: this is developed through the syllabus emphasis on critical thinking and research. Students research a range of information sources, discerning their relevance to particular PDHPE issues. Skills of analysis are applied to explaining the ways the body moves, interpreting a range of data and monitoring the effectiveness of health policies and programs.

**Communicating ideas and information**: this competency is developed in all aspects of the syllabus. Students develop the capacity to select appropriate means to communicate relevant understandings. This includes the demonstration of understandings and ideas through movement.

**Planning and organising activities**: this is developed in contexts such as setting goals for improved personal health, strategic planning for safe outdoor recreation, preventive health action, organising training programs and designing health promotion strategies.

**Working with others and in teams**: there are significant opportunities for students to work cooperatively and adopt leadership roles in the context of this syllabus. This competency is embedded in the modules Composition and Performance and Outdoor Recreation. Other modules integrate coaching experiences that further develop the capacity to work with others.

**Using mathematical ideas and techniques**: students develop basic mathematical concepts in the interpretation of trend data related to epidemiology. This is further developed through measuring physical fitness and examining the physiology of the body. As students appraise movement they are also required to use mathematics in analysing quantitative measures of performance.

**Using technology**: research and investigation in this syllabus involves using appropriate information technologies. Students also examine technologies related to training, sports medicine, the enhancement of performance and the health of Australians.

**Solving problems**: the study of contemporary health and physical activity issues presents students with a range of challenging problems. The syllabus requires students to examine options and consider ethical dimensions when proposing solutions to these problems.
8 Content: PDHPE Stage 6 Preliminary Course

8.1 Preliminary Core 1: Better Health for Individuals

This module should occupy approximately 30% of total course time.

Module Description

This compulsory module examines the meanings of health, the perceptions individuals have about health and the range of factors and behaviours that influence health. Students are introduced to health promotion and investigate approaches and strategies that can assist individuals to achieve better health.

In this module, students investigate the following critical questions:

- What does health mean to individuals?
- What influences the health of individuals?
- What strategies help promote the health of individuals?

After studying this module, students will understand and value how a wide range of factors interact to support an individual to achieve better health. This understanding is further developed in the HSC core module, Health Priorities in Australia.

Outcomes

A student:

P1 identifies and examines why individuals give different meanings to health
P2 explains how a range of health behaviours affect an individual’s health
P3 describes how an individual’s health is determined by a range of factors
P4 evaluates aspects of health over which individuals can exert some control
P5 describes factors that contribute to effective health promotion
P6 proposes actions that can improve and maintain an individual’s health
P15 forms opinions about health-promoting actions based on a critical examination of relevant information
P16 uses a range of sources to draw conclusions about health and physical activity concepts.
What does health mean to individuals?

Students learn about:

- meanings of health
  - definitions of health
  - dimensions of health
  - relative and dynamic nature of health

- perceptions of health
  - perceptions of their health
  - perceptions of the health of others eg parents, the elderly, the homeless
  - implications of different perceptions of health
  - perceptions of health as social constructs
  - impact of the media, peers and family

Students learn to:

- examine the dynamic nature of health by exploring:
  - the interactions between the dimensions
  - the concept of good health
  - the health continuum
  - how health changes over time
  - how an individual’s circumstances affect their health

- examine perceptions of health by exploring questions such as:
  - how healthy am I? How healthy do other people think I am?
  - how healthy do I think other people are?
  - why would my perceptions of health be similar or different to others?
  - how might an individual’s perception of health affect their behaviour and wellbeing?

- determine the degree to which perceptions of health are socially constructed

Teacher Note: When studying this core, emphasis should be on drawing from realistic contexts relevant to students. These include food habits, body image, physical activity, drug use, mental health, sexual health and road safety.

- health behaviours of young people
  - the positive health status of young people
  - protective behaviours and risk behaviours

- explore current research and information to:
  - identify the prevalence of and trends in the health behaviours of young people
  - challenge the accuracy of societal perceptions of the health behaviours of young people

- identify protective and risk behaviours for health issues relevant to young people and predict how risk decreases or increases when multiple factors interact
What influences the health of individuals?

Students learn about:

- the determinants of health
  - individual factors, eg knowledge and skills, attitudes, genetics
  - sociocultural factors, eg family, peers, media, religion, culture
  - socioeconomic factors, eg employment, education, income
  - environmental factors, eg geographical location, access to health services and technology
- the degree of control individuals can exert over their health
  - modifiable and non-modifiable health determinants
  - the changing influence of determinants through different life stages
- health as a social construct
  - recognises the interrelationship of determinants
  - challenges the notion that health is solely an individual’s responsibility.

Students learn to:

- analyse how an individual’s health can be determined by a range of factors acting in various combinations
- assess the degree of control individuals have over their health, by exploring questions such as:
  - how much control do individuals have over the determinants?
  - what can individuals do to modify the determinants they have little control over?
  - how does the level of influence of the determinants change over time?
- investigate how the determinants of health explain why some individuals and groups have better or worse health than others.

What strategies help to promote the health of individuals?

Students learn about:

- what is health promotion
- responsibility for health promotion
  - individuals
  - community groups/schools
  - non-government organisations
  - government
  - international organisations, eg WHO, United Nations

Students learn to:

- describe the various health promotion roles and responsibilities adopted by individuals, groups and governments
• health promotion approaches and strategies
  – lifestyle/behavioural approaches, eg quit smoking programs, health education
  – preventative medical approaches, eg childhood immunisation, cancer screening
  – public health approaches, eg health-promoting schools and workplaces

• determine the effectiveness of a range of health promotion strategies relevant to young people, eg government interventions relating to alcohol consumption and young drivers

• propose other actions that may improve the health of young people

• the Ottawa Charter as an effective health promotion framework
  – developing personal skills
  – creating supportive environments
  – strengthening community action
  – reorienting health services
  – building healthy public policy

• describe the historical significance of the Ottawa Charter for Health Promotion

• explain how health promotion based on the action areas of the Ottawa Charter have contributed to positive health outcomes. For example:
  – reduction in road injuries
  – reduction in tobacco use

• principles of social justice
  – equity
  – diversity
  – supportive environments.

• identify strategies where the principles of social justice have been applied to promote the health of individuals.

Suggested teaching and learning strategies

Given a case study of an individual, analyse the factors that influence the individual’s health behaviours. Give examples from the five action areas of the Ottawa Charter to illustrate what strategies could be implemented to promote their health.

Respond to this slogan: ‘Good health is your responsibility. Act now!’ Does it provide the best explanation for how health is determined?
8.2 Preliminary Core 2: The Body in Motion

This module should occupy approximately 30% of total course time.

Module Description

This compulsory module examines the scientific foundations of human movement. In this module, students explore how the body moves and why it moves in particular ways. Students focus on the relationships between anatomy, physiology, fitness, biomechanics and efficient human movement.

In this module, students investigate the following critical questions:

- How do the musculoskeletal and cardiorespiratory systems of the body influence and respond to movement?
- What is the relationship between physical fitness, training and movement efficiency?
- How do biomechanical principles influence movement?

This module forms a basis for a more detailed study of physiology and improving performance in the HSC course.

Outcomes

A student:

P7 explains how body systems influence the way the body moves
P8 describes the components of physical fitness and explains how they are monitored
P9 describes biomechanical factors that influence the efficiency of the body in motion
P10 plans for participation in physical activity to satisfy a range of individual needs
P11 assesses and monitors physical fitness levels and physical activity patterns
P16 uses a range of sources to draw conclusions about health and physical activity concepts
P17 analyses factors influencing movement and patterns of participation.
### How do the musculoskeletal and cardiorespiratory systems of the body influence and respond to movement?

**Students learn about:**
- **skeletal system**
  - major bones involved in movement
  - structure and function of synovial joints
  - joint actions, eg extension and flexion
- **muscular system**
  - major muscles involved in movement
  - muscle relationship (agonist, antagonist)
  - types of muscle contraction (concentric, eccentric, isometric)
- **respiratory system**
  - structure and function
  - lung function (inspiration, expiration)
  - exchange of gases (internal, external)
- **circulatory system**
  - components of blood
  - structure and function of the heart, arteries, veins, capillaries
  - pulmonary and systemic circulation
  - blood pressure.

**Students learn to:**
- identify the location and type of major bones involved in movement, eg long bones articulate at hinge joints for flexion and extension
- identify the location of the major muscles involved in movement and related joint actions
- perform and analyse movements, eg overarm throw, by examining:
  - bones involved and the joint action
  - muscles involved and the type of contraction
- analyse the various aspects of lung function through participation in a range of physical activities
- analyse the movement of blood through the body and the influence of the circulatory and respiratory systems on movement efficiency and performance.

### What is the relationship between physical fitness, training and movement efficiency?

**Students learn about:**
- **health-related components of physical fitness**
  - cardiorespiratory endurance
  - muscular strength
  - muscular endurance
  - flexibility
  - body composition
- **skill-related components of physical fitness**
  - power
  - speed
  - agility
  - coordination
  - balance
  - reaction time

**Students learn to:**
- analyse the relationship between physical fitness and movement efficiency. Students should consider the question ‘to what degree is fitness a predictor of performance?’
- measure and analyse a range of both health-related and skill-related components of physical fitness
- think critically about the purpose and benefits of testing physical fitness
• aerobic and anaerobic training
  – FITT principle
• design an aerobic training session based on the FITT principle
• compare the relative importance of aerobic and anaerobic training for different sports, e.g., gymnastics versus soccer

• immediate physiological responses to training
  – heart rate
  – ventilation rate
  – stroke volume
  – cardiac output
  – lactate levels.
• examine the reasons for the changing patterns of respiration and heart rate during and after submaximal physical activity.

How do biomechanical principles influence movement?

Teacher Note: These selected areas of biomechanics should be studied through practical workshops and need only be dealt with in sufficient detail to understand their link to fundamental movement, e.g., why do you lean forward to accelerate?

Students learn about:

• motion
  – the application of linear motion, velocity, speed, acceleration, momentum in movement and performance contexts
• balance and stability
  – centre of gravity
  – line of gravity
  – base of support
• fluid mechanics
  – flotation, centre of buoyancy
  – fluid resistance

Students learn to:

• apply principles of motion to enhance performance through participation in practical workshops
• apply principles of balance and stability to enhance performance through participation in practical workshops
• apply principles of fluid mechanics to enhance performance through participation in practical workshops
• describe how principles of fluid mechanics have influenced changes in movement and performance, e.g., technique modification, clothing/suits, equipment/apparatus
• apply principles of force to enhance performance through participation in practical workshops.

• force
  – how the body applies force
  – how the body absorbs force
  – applying force to an object.
Suggested teaching and learning strategies

With a group of students conduct a number of different fitness tests designed to measure the same element of physical fitness. Prepare a report on the results of each group member and discuss any variations in results across the tests.

Analyse a range of movements or performances to identify how biomechanical principles influence technique, eg multimedia analysis.
8.3 Preliminary Option 1: First Aid

This module should occupy approximately 20% of total course time.

Module Description

This option module addresses the need for a well-rehearsed, established routine in the delivery of first aid. In this module, students engage in the investigation and practical application of the major assessment and management techniques for the types of injury and medical conditions that require first aid attention. They explore the cause and symptoms of these main injuries and medical conditions. Students also explore the ethical arguments associated with the delivery of first aid.

In this module, students investigate the following critical questions:

- What are the main priorities for assessment and management of first aid patients?
- How should the major types of injuries and medical conditions be managed in first aid situations?
- What does the individual need to consider in administering first aid?

This module prepares students for undertaking a positive first aid role desirable in many settings, including the workplace. It is possible that this module can be delivered in such a way that those students wishing to gain an accredited first aid certificate are able to do so. Students have the opportunity to further develop related skills in the HSC option module Sports Medicine.

Outcomes

A student:

- P6 proposes actions that can improve and maintain an individual's health
- P12 demonstrates strategies for the assessment, management and prevention of injuries in first aid settings
- P15 forms opinions about health-promoting actions based on a critical examination of relevant information
- P16 uses a range of sources to draw conclusions about health and physical activity concepts.
**What are the main priorities for assessment and management of first aid patients?**

Students learn about:
- setting priorities for managing a first aid situation and assessing the casualty
  - situational analysis
  - priority assessment procedures
  - DRSABCD (Danger, Response, Send for help, Airway, Breathing, CPR, Defibrillation)
  - STOP (Stop, Talk, Observe, Prevent further injury)
- crisis management
  - cardiopulmonary resuscitation (CPR)
  - bleeding
  - shock
  - neck and spinal injury
  - moving the casualty
  - medical referral
  - care of the unconscious casualty.

Students learn to:
- plan and conduct appropriate assessment and management procedures in response to a range of first aid scenarios
- demonstrate CPR procedures using a manikin
- use safe procedures when moving a casualty.

**Teacher Note:** Students require a general understanding of the anatomical and physiological bases for their actions in assessment and crisis management scenarios, eg the effect of shock on circulation, the reason for head tilt to open the airway, the point at which medical referral is required.

**How should the major types of injuries and medical conditions be managed in first aid situations?**

Students learn about:
- management of injuries
  - cuts and lacerations
  - fractures
  - dislocations
  - head injuries and concussion
  - eye injuries
  - nasal injuries
  - burn injuries
  - teeth injuries
  - electrocution
  - chest injuries
  - abdominal injuries
- management of medical conditions
  - heart attack
  - stroke
  - diabetes
  - epilepsy
  - asthma
  - anaphylaxes
  - poisoning
  - bites and stings
  - exposure to heat and cold.

Students learn to:
- identify signs and symptoms, and primary management for each injury and medical condition
- apply bandages, slings and splints appropriately in the treatment of particular injuries
- explain the nature of the identified medical conditions.
What does the individual need to consider in administering first aid?

Students learn about:

- physical environment
  - traffic accidents
  - water environment
  - electricity

- infection control and protection
  - HIV/AIDS
  - blood-borne viruses (Hepatitis B and C)

- legal and moral dilemmas
  - legal implications, eg Occupational Health and Safety legislation, litigation
  - moral obligations, eg duty of care, responsible citizenship
  - commonsense versus heroics

- support following first aid situations
  - debriefing
  - counselling.

Students learn to:

- analyse the particular safety issues associated with each physical environment and formulate specific self-protective strategies that should be observed

- describe the procedures to be taken to reduce risk of contact with body fluids and in the event of contact with body fluids in first aid settings

- debate the legal and moral dilemmas associated with providing first aid

- distinguish between a manageable first aid situation and an emergency situation

- identify available sources of support for those involved in the delivery of emergency first aid.

Suggested Assessment Strategies

Demonstrate using a manikin the procedure for assessment of an unconscious patient, including the application of CPR.

Conduct a safety audit of a familiar setting and recommend preventative strategies to be put in place as necessary.

Prepare a presentation on the nature of a particular medical condition and its first aid treatment.
8.4 Preliminary Option 2: Composition and Performance

This module should occupy approximately 20% of total course time.

Module Description

This option module is concerned with the way that movement is composed and performed. Students explore the elements of composition and apply them to movement skills in a medium of their choice. This process will lead to students performing a gymnastic sequence, dance, aerobics routine or games strategies. Students also develop appropriate ways of appraising performance and use the resulting feedback to refine their compositions.

In this module, students investigate the following critical questions:

- How do the elements of composition apply to different movement mediums?
- How are the elements used to compose movement?
- What is the role of appraisal in the process of composing and performing?

In this module, it is assumed that students’ compositions will build on existing skills in the selected medium. It may be necessary, however, to further develop these skills and add new skills to their movement repertoire in order to maximise performance potential.

Outcomes

A student:

P13 develops, refines and performs movement compositions in order to achieve a specific purpose

P16 uses a range of sources to draw conclusions about health and physical activity concepts

P17 analyses factors influencing movement and patterns of participation.
### How do the elements of composition apply to different movement mediums?

**Teacher Note:** It is suggested that a range of mediums are explored when introducing the elements of composition. In this way, students will be able to appreciate the commonalities and unique features of each medium.

**Students learn about:**
- **space**
  - direction, eg sideways, diagonal, up, down, around, zig zag
  - level, eg high, medium, low
  - dimensions, eg shrinking, expanding, field and court size
  - patterns and formations, eg regular versus irregular, circles, lines, squares, offensive and defensive patterns
- **dynamics**
  - force, eg strong, weak, explosive, jerky
  - flow, eg bound, free
- **time and rhythm**
  - musical applications, eg beat, tempo, accent
  - duration
  - momentum
  - self-paced versus externally paced
  - timing
- **relationships**
  - other people, eg audience, performers, opponents, team members, partners
  - apparatus and equipment
  - team formations, positional play, partner work.

**Students learn to:**
- **use variations of spatial elements in a range of movement contexts, eg**
  - performance space in dance and gymnastics
  - ways of creating and reducing space in games situations
  - simple aerobic routines by varying direction and formation
- **identify how changing dynamics can achieve specific purposes, eg**
  - communication of ideas
- **investigate how rhythm and timing relate to different movement mediums, eg golf swing, running tempo, gymnastics**
- **distinguish between the effects of self-paced and externally paced activity for composition of movement**
- **perform selected movement skills in unison and in contrast to others**
- **analyse the purpose of various group formations, eg games formations, transitions in a dance sequence.**

### How are the elements used to compose movement?

**Teacher Note:** In this section, students are to specialise in a selected medium in order to develop and perform a movement composition. In their composition they apply those elements that have relevance to their medium.

**Students learn about:**
- **the process of creating movement**
  - defining the purpose or motivating factors
  - generating movement relevant to the purpose

**Students learn to:**
- **distinguish those elements of composition and movement skills that relate to the purpose of their selected medium**
- exploring variations  
- improvising  

- extend their movement repertoire through improvisation  
- explore ways of linking movement between phases of a performance, eg moving on and off stage, turning defensive formation into attacking formation, moving from a balance to prepare for a tumbling run  
- experiment with the effects that variations in movement and elements have on the performance  
- design and perform an individual or group performance in a selected medium.

### What is the role of appraisal in the process of composing and performing?

**Students learn about:**

- ways of appraising (observing, analysing, experiencing)  
- aspects for appraisal  
  - elements of composition  
  - creativity and innovation  
  - arrangement of movement  
  - achievement of purpose  
- establishing and applying criteria.

**Students learn to:**

- appreciate mediums from an aesthetic and artistic perspective  
- design criteria that reflect each of the aspects of appraisal and apply them to a performance  
- use appraisal feedback to identify areas for modification.

### Suggested teaching and learning strategies

**Design a set of criteria for appraising the performance.**

**Observe a range of performances on video and identify how the elements of composition have been applied.**

**Use compositional skills to solve a range of movement problems in a selected medium.**

**Develop an improvisation to change the nature of a set routine.**
8.5 Preliminary Option 3: Fitness Choices

This module should occupy approximately 20% of total course time.

Module Description

This option module examines the exercise options that are available to meet the varying fitness needs of individuals. In this module, students investigate what exercise means to different people and the factors that influence exercise choices. As a major focus of this module, students experience a range of exercise options and evaluate the ability of each to meet individual fitness needs.

In this module, students investigate the following critical questions:

- What does exercise mean to different people?
- What are the ways people choose to exercise for fitness?
- What influences people’s choice of fitness activities?

This module enables students to reflect on their personal exercise needs and preferences and make informed consumer decisions about exercise options that address these needs.

Outcomes

A student:

P5 describes factors that contribute to effective health promotion
P6 proposes actions that can improve and maintain an individual’s health
P10 plans for participation in physical activity to satisfy a range of individual needs
P15 forms opinions about health-promoting actions based on a critical examination of relevant information
P16 uses a range of sources to draw conclusions about health and physical activity concepts
P17 analyses factors influencing movement and patterns of participation.
### What does exercise mean to different people?

**Students learn about:**
- meanings of exercise
  - exercise as a form of physical activity
  - exercise and its relationship to fitness
- the value that people place on exercise and fitness
  - changing attitudes to fitness
  - fitness as a commodity.

**Students learn to:**
- critically examine questions such as:
  - to what extent should exercise be a part of lifestyle?
  - what does it mean to be fit?
- analyse a range of opinions about the value that people place on fitness.

### What are the ways people choose to exercise for fitness?

**Teacher Note:** In this section, students should be provided with opportunities to maximise their participation in a variety of fitness activities and reflect on their value. Students do not require a detailed knowledge of how to design various fitness activities, eg aerobics. It is not essential that these opportunities be provided in specialised facilities. The focus may be on those activities which can be provided within the school.

**Students learn about:**
- individual fitness activities, eg
  - power walking/running
  - swimming
  - cycling
  - weight training programs
  - tai chi
  - pilates/yoga
  - emerging individual fitness activities
- group fitness activities, eg
  - aerobics/aquarobics
  - pump/step/spin classes
  - circuit training
  - team games
  - exercise for specific groups, eg exercise for pregnancy, children, fitness, gentle exercise for the aged
  - emerging group fitness activities

**Students learn to:**
- evaluate the range and variety of fitness activities available
- participate competently and safely in a range of fitness activities
- compare a variety of forms of fitness activities by investigating:
  - the benefits of this fitness activity
  - where the fitness activity is available
  - who would be attracted to this activity
  - cost involved
  - time commitment required
  - sources for further information
  - personal reflections on participation
What influences people’s choice of fitness activities?

Students learn about:
- settings for exercise
  - exercise at home, eg home gyms
  - community facilities
  - fitness centres and personal trainers
  - exercise clubs, eg running, walking, cycling
  - cultural groups
- advertising and promotion
  - how do you know who to believe?
  - promotional techniques, eg direct marketing, limited offer memberships
  - accuracy of information
  - ethics of advertising
- motivators and barriers to participation
  - access to facilities
  - convenience of use
  - cost
  - feelings about fitness and exercise
  - exercise as a priority
  - influence of other responsibilities, eg family, work

Students learn to:
- evaluate the appropriateness of fitness activities to them by investigating:
  - does this fitness activity suit my fitness needs?
  - could I continue to participate in this fitness activity? Why? Why not?
  - are other fitness activities more suitable for me?
- analyse advertisements for fitness and exercise services by investigating:
  - who is the advertisement targeting?
  - what does the advertisement offer?
  - what are the benefits of the service?
  - are the claims believable?
- describe their own exercise preferences by considering:
  - their motivation for exercising
  - the influences acting on their choice of exercise for fitness
  - their feelings about establishing a training partner
  - barriers that they need to overcome.

Suggested teaching and learning strategies

Prepare oral and written presentations that:
- analyse an exercise option, eg aerobics, power walking
- examine the exercise options available in the local area.

Maintain a reflective journal based on participation in a variety of fitness activities. Journal entries could reflect on:
- enjoyment gained from the activity
- accessibility to the activity to continue participation
- benefits to be gained from continued participation in the activity.

Interview a range of people about:
- their motivations for exercising
- the barriers that prevent them from exercising.
8.6 Preliminary Option 4: Outdoor Recreation

This module should occupy approximately 20% of total course time.

Module Description

This option module focuses on the development of skills, understanding and attitudes necessary for safe participation in outdoor recreation activities. Students undertake practical learning experiences in order to develop technical skills of campcraft, navigation and survival action. They analyse the interpersonal aspects that enhance the effectiveness of groups in outdoor recreation settings. Students also think critically about the benefits of outdoor recreation and issues such as conservation and managing risk.

In this module, students investigate the following critical questions:

- What is the value of outdoor recreation?
- What are the technical skills and understanding needed for safe participation in outdoor recreation?
- What impact does group dynamics have on the outdoor experience?

The study of this module provides students with the opportunity to develop leadership skills and the ability to work in teams. The combination of engaging with the environment and the challenges it presents offers a unique personal development experience.

Outcomes

A student:

P6 proposes actions that can improve and maintain an individual’s health
P10 develops plans for participation in physical activity to satisfy a range of individual needs
P14 demonstrates the technical and interpersonal skills necessary to participate safely in challenging outdoor recreation activities
P16 uses a range of sources to draw conclusions about health and physical activity concepts
P17 analyses factors influencing movement and patterns of participation.
### What is the value of outdoor recreation?

**Students learn about:**
- reasons for participation in outdoor recreation
  - stress management/relaxation
  - enjoyment, challenge and excitement
  - social interaction
  - appreciation of the environment
  - health and fitness.

**Students learn to:**
- recognise the physical, social, intellectual, spiritual and emotional outcomes that may result from participation in outdoor recreation.

### What are the technical skills and understanding needed for safe participation in outdoor recreation?

**Students learn about:**
- planning skills
  - environment planning, eg weather, venue
  - emergency management planning/risk assessment, eg escape routes, first aid
  - preparation, communication modes with external authorities, reconnoitre of routes
  - food and water considerations
  - resources for safe participation, eg tent, protective clothing
  - legal and administrative requirements, eg permission, liaison with authorities, trip intention forms

- campsite selection
  - geographic, environmental and climatic considerations
  - establishing the camp site (fireplace, waste disposal)
  - tree fall evaluation

- conservation skills
  - ‘leave no trace’ camping
  - minimal impact practices
  - ethical issues, eg impact of activities on the environment

**Students learn to:**
- design checklists and strategic plans to manage the preparation for an outdoor experience
- determine the essential requirements for an outdoor experience in order to ensure that loads to be carried are manageable
- assess the suitability of a camp site by considering issues such as distance from creeks and trees, and waste disposal considerations
- critically examine the implications of the following for planning and behaviour: ‘take nothing but photos and leave nothing but footprints’; ‘leave the area cleaner than you found it’
- debate issues from ethical dimensions such as:
  - should areas be set aside as human-free?
  - should 4WD and hiking be banned from some areas?
- navigational skills
  - map reading
  - grid bearing
  - magnetic bearing
  - true north
  - measuring distance
  - natural navigation (using sun, stars)
- emergency management skills
  - wilderness first aid, eg thermoregulation, snake bite
  - what to do when you are lost
  - bushfire procedures, lightning, flooded rivers
- skills needed for other outdoor activities relevant to the experience, eg
  - canoeing/kayaking skills
  - abseiling skills.

**What impact does group dynamics have on the outdoor experience?**

Students learn about:

- leadership styles
  - democratic
  - laissez-faire
  - autocratic
  - strategic non-intervention
- understanding group dynamics
  - stages of group dynamics (form, storm, norm, transform)
  - conflict resolution
  - team building
  - cooperation
- facilitation skills
  - communication skills
  - decision-making
  - flexibility
- understanding strengths and weaknesses
  - participant readiness
  - self-efficacy
  - balancing challenge and safety (challenge by choice, taking risks in bounds of competence)
  - pushing the comfort zone

Students learn to:

- navigate using a compass and maps with varying detail
- estimate the approximate time that it will take to walk a designated route
- analyse a range of risk situations and propose prevention and management strategies
- describe how to construct an emergency shelter using natural materials
- perform relevant outdoor activities safely and with a basic level of proficiency.
- distinguish between the different leadership styles and debate their suitability for different situations
- work cooperatively to solve simulated initiative challenges
- distinguish actions that enhance group cohesion when working in teams
- apply cooperative decision-making processes to solve problems and challenges faced in outdoor experiences
- debate questions such as:
  - how do you control risks when participants are encouraged to push their comfort zone?
  - what ethical considerations confront a leader in balancing challenge and safety?
Suggested teaching and learning strategies

Present a practical demonstration and explanation of one key outdoor skill area, for example:
- map reading
- orienteering and compass work
- route planning
- wilderness/remote area first aid.

In pairs, work cooperatively to successfully complete an initiative game demonstrating the interpersonal skills needed in outdoor recreation, for example teamwork, cooperation, problem-solving.

Plan a three-day camp for 15 participants, detailing all aspects that need to be considered.
9 Content: PDHPE Stage 6 HSC Course

9.1 HSC Core 1: Health Priorities in Australia

This module should occupy approximately 30% of total course time.

Module Description

This compulsory module examines the health status of Australians and investigates, in depth, the current health priority issues in Australia. Students identify and justify the choice of priority issues and examine the roles that the health system and health promotion play in achieving better health for all Australians.

In this module, students investigate the following critical questions:

- How are priority issues for Australia’s health identified?
- What are the priority issues for improving Australia’s health?
- What role do health care facilities and services play in achieving better health for all Australians?
- What actions are needed to address Australia’s health priorities?

In this module, students learn how health can be promoted by personal and community action and by policies and services at all levels of responsibility. The module introduces concepts of health inequities in Australia that are further explored in the options module Equity and Health.

Outcomes

A student:

H1 describes the nature and justifies the choice of Australia’s health priorities
H2 analyses and explains the health status of Australians in terms of current trends and groups most at risk
H3 analyses the determinants of health and health inequities
H4 argues the case for health promotion based on the Ottawa Charter
H5 explains the different roles and responsibilities of individuals, communities and governments in addressing Australia’s health priorities
H14 argues the benefits of health-promoting actions and choices that promote social justice
H15 critically analyses key issues affecting the health of Australians and proposes ways of working towards better health for all
H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts.
### How are priority issues for Australia’s health identified?

**Students learn about:**

- measuring health status
  - role of epidemiology
  - measures of epidemiology (mortality, infant mortality, morbidity, life expectancy)
- identifying priority health issues
  - social justice principles
  - priority population groups
  - prevalence of condition
  - potential for prevention and early intervention
  - costs to the individual and community

**Students learn to:**

- critique the use of epidemiology to describe health status by considering questions such as:
  - what can epidemiology tell us?
  - who uses these measures?
  - do they measure everything about health status?
- use tables and graphs from health reports to analyse current trends in life expectancy and major causes of morbidity and mortality for the general population and comparing males and females
- argue the case for why decisions are made about health priorities by considering questions such as:
  - how do we identify priority issues for Australia’s health?
  - what role do the principles of social justice play?
  - why is it important to prioritise?

**Teacher Note:** Students do not need to know the latest statistics on the rates of illness and death. It is only important that they understand trends such as whether the prevalence of leading causes is on the increase, decrease or stable.

### What are the priority issues for improving Australia’s health?

**Students learn about:**

- groups experiencing health inequities
  - Aboriginal and Torres Strait Islander peoples
  - socioeconomically disadvantaged people
  - people in rural and remote areas
  - overseas-born people
  - the elderly
  - people with disabilities

**Students learn to:**

- research and analyse Aboriginal and Torres Strait Islander peoples and ONE other group experiencing health inequities by investigating:
  - the nature and extent of the health inequities
  - the sociocultural, socioeconomic and environmental determinants
  - the roles of individuals, communities and governments in addressing the health inequities
What role do health care facilities and services play in achieving better health for all Australians?

Students learn about:

- high levels of preventable chronic disease, injury and mental health problems
  - cardiovascular disease (CVD)
  - cancer (skin, breast, lung)
  - diabetes
  - respiratory disease
  - injury
  - mental health problems and illnesses

- a growing and ageing population
  - healthy ageing
  - increased population living with chronic disease and disability
  - demand for health services and workforce shortages
  - availability of carers and volunteers.

- research and analyse CVD, cancer and ONE other condition listed by investigating:
  - the nature of the problem
  - extent of the problem (trends)
  - risk factors and protective factors
  - the sociocultural, socioeconomic and environmental determinants
  - groups at risk

- assess the impact of a growing and ageing population on:
  - the health system and services
  - health service workforce
  - carers of the elderly
  - volunteer organisations.

Students learn to:

- health care in Australia
  - range and types of health facilities and services
  - responsibility for health facilities and services
  - equity of access to health facilities and services
  - health care expenditure versus expenditure on early intervention and prevention
  - impact of emerging new treatments and technologies on health care, eg cost and access, benefits of early detection
  - health insurance: Medicare and private

- complementary and alternative health care approaches
  - reasons for growth of complementary and alternative health products and services
  - range of products and services available
  - how to make informed consumer choices

- evaluate health care in Australia by investigating issues of access and adequacy in relation to social justice principles. Questions to explore include:
  - how equitable is the access and support for all sections of the community?
  - how much responsibility should the community assume for individual health problems?

- describe the advantages and disadvantages of Medicare and private health insurance, eg costs, choice, ancillary benefits

- critically analyse complementary and alternative health care approaches by exploring questions such as:
  - how do you know who to believe?
  - what do you need to help you make informed decisions?
What actions are needed to address Australia’s health priorities?

Students learn about:

• health promotion based on the five action areas of the Ottawa Charter
  – levels of responsibility for health promotion
  – the benefits of partnerships in health promotion, eg government sector, non-government agencies and the local community
  – how health promotion based on the Ottawa Charter promotes social justice
  – the Ottawa Charter in action

Students learn to:

• argue the benefits of health promotion based on:
  – individuals, communities and governments working in partnership
  – the five action areas of the Ottawa Charter

• investigate the principles of social justice and the responsibilities of individuals, communities and governments under the action areas of the Ottawa Charter

• critically analyse the importance of the five action areas of the Ottawa Charter through a study of TWO health promotion initiatives related to Australia’s health priorities

Suggested teaching and learning strategies

Construct and evaluate a profile of the health status of Australians by drawing on the results of epidemiology.

Present an argument to suggest that not all population groups in Australia enjoy equal health.

Select one priority health issue (e.g. increasing health inequities) and evaluate how this may impact on health care facilities and services.

Describe a health promotion initiative and evaluate how it exemplifies the action areas of the Ottawa Charter.
9.2  HSC Core 2: Factors Affecting Performance

This module should occupy approximately 30% of total course time

Module Description

This compulsory module examines the factors that affect performance. In this module, students explore the physical and psychological bases of performance. They experience and critically analyse approaches to training and skill development and investigate the contributions of psychology, nutrition and recovery strategies to performance.

In this module, students investigate the following critical questions:

• How does training affect performance?
• How can psychology affect performance?
• How can nutrition and recovery strategies affect performance?
• How does the acquisition of skill affect performance?

This module enables students to take action to influence their own performance and enhance that of others through coaching applications.

Opportunity is provided in the HSC option Improving Performance for more detailed consideration of factors affecting performance and the considerations of a coach in supporting the performance of athletes.

Outcomes

A student:
H7  explains the relationship between physiology and movement potential
H8  explains how a variety of training approaches and other interventions enhance performance and safety in physical activity
H9  explains how movement skill is acquired and appraised
H10 designs and implements training plans to improve performance
H11 designs psychological strategies and nutritional plans in response to individual performance needs
H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts
H17 selects appropriate options and formulates strategies based on a critical analysis of the factors that affect performance and safe participation.
How does training affect performance?

**Teacher Note:** Students should be provided with opportunities to explore the concepts dealt with in this module through a variety of practical experiences.

Students learn about:

- energy systems
  - alactacid system (ATP/PC)
  - lactic acid system
  - aerobic system

- types of training and training methods
  - aerobic, eg continuous, Fartlek, aerobic interval, circuit
  - anaerobic, eg anaerobic interval
  - flexibility, eg static, ballistic, PNF, dynamic
  - strength training, eg free/fixed weights, elastic, hydraulic

- principles of training
  - progressive overload
  - specificity
  - reversibility
  - variety
  - training thresholds
  - warm up and cool down

- physiological adaptations in response to training
  - resting heart rate
  - stroke volume and cardiac output
  - oxygen uptake and lung capacity
  - haemoglobin level
  - muscle hypertrophy
  - effect on fast/slow twitch muscle fibres

Students learn to:

- analyse each energy system by exploring:
  - source of fuel
  - efficiency of ATP production
  - duration that the system can operate
  - cause of fatigue
  - by-products of energy production
  - process and rate of recovery

- assess the relevance of the types of training and training methods for a variety of sports by asking questions such as:
  - which types of training are best suited to different sports?
  - which training method(s) would be most appropriate? Why?
  - how would this training affect performance?

- analyse how the principles of training can be applied to both aerobic and resistance training

- examine the relationship between the principles of training, physiological adaptations and improved performance

How can psychology affect performance?

Students learn about:

- motivation
  - positive and negative
  - intrinsic and extrinsic

Students learn to:

- evaluate performance scenarios to determine the appropriate forms of motivation, eg golf versus boxing
- anxiety and arousal
  - trait and state anxiety
  - sources of stress
  - optimum arousal
- psychological strategies to enhance motivation and manage anxiety
  - concentration/attention skills (focusing)
  - mental rehearsal/visualisation/imagery
  - relaxation techniques
  - goal-setting.

- explain the difference between anxiety and arousal in terms of the effects on performance
- research case studies of athletes from different sports and ascertain the nature of their motivation and the psychological strategies they employ.

### How can nutrition and recovery strategies affect performance?

**Students learn about:**

- nutritional considerations
  - pre-performance, including carbohydrate loading
  - during performance
  - post-performance
- supplementation
  - vitamins/minerals
  - protein
  - caffeine
  - creatine products
- recovery strategies
  - physiological strategies, eg cool down, hydration
  - neural strategies, eg hydrotherapy, massage
  - tissue damage strategies, eg cryotherapy
  - psychological strategies, eg relaxation.

**Students learn to:**

- compare the dietary requirements of athletes in different sports considering pre-, during and post-performance needs
- critically analyse the evidence for and against supplementation for improved performance
- research recovery strategies to discern their main features and proposed benefits to performance.

### How does the acquisition of skill affect performance?

**Students learn about:**

- stages of skill acquisition
  - cognitive
  - associative
  - autonomous
- characteristics of the learner, eg personality, heredity, confidence, prior experience, ability

**Students learn to:**

- examine the stages of skill acquisition by participating in the learning of a new skill, eg juggling, throwing with the non-dominant arm
- describe how the characteristics of the learner can influence skill acquisition and the performance of skills
• the learning environment
  – nature of the skill (open, closed, gross, fine, discrete, serial, continuous, self-paced, externally paced)
  – the performance elements (decision-making, strategic and tactical development)
  – practice method (massed, distributed, whole, part)
  – feedback (internal, external, concurrent, delayed, knowledge of results, knowledge of performance)

• assessment of skill and performance
  – characteristics of skilled performers, eg kinaesthetic sense, anticipation, consistency, technique
  – objective and subjective performance measures
  – validity and reliability of tests
  – personal versus prescribed judging criteria

• design a suitable plan for teaching beginners to acquire a skill through to mastery. The plan should reflect:
  – appropriate practice methods for the learners
  – the integration of relevant performance elements
  – an awareness of how instruction may vary according to characteristics of the learner
  – how feedback will be used as learners progress through the stages of skill acquisition

• develop and evaluate objective and subjective performance measures to appraise performance

Suggested teaching and learning strategies

Prepare a flow chart representing the chain of events in the production and use of aerobic and anaerobic energy. Have students explain their diagrams to other students.

Demonstrate an understanding of the process of skill acquisition by teaching skills to a group of younger students.

Conduct an experiment on the influence of feedback in a skill development session. Prepare a report critiquing the various forms of feedback available and the degree to which each is likely to enhance the learning process.

Critically review an article on psychological influences on performance, outlining their relevance to personal application.
9.3 HSC Option 1: The Health of Young People

This module should occupy approximately 20% of total course time.

Module Description

This option module is concerned with the health needs of young people. In this module, students examine the nature of young people’s lives and the developmental factors that significantly influence their health. They consider the health status of young people and examine a number of related health issues. Students discover that there is much that can be done to support the health of young people and they critically analyse the level of support currently available. Students are encouraged to develop a positive view of the future and a preparedness to contribute towards that future.

In this module, students investigate the following critical questions:

- What is good health for young people?
- To what extent do Australia’s young people enjoy good health?
- What skills and actions enable young people to attain better health?

Outcomes

A student:

H2 analyses and explains the health status of Australians in terms of current trends and groups most at risk
H5 explains the different roles and responsibilities of individuals, communities and governments in addressing Australia’s health priorities
H6 demonstrates a range of personal health skills that enables them to promote and maintain health
H14 argues the benefits of health-promoting actions and choices that promote social justice
H15 critically analyses key issues affecting the health of Australians and proposes ways of working towards better health for all
H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts.
What is good health for young people?

Students learn about:

- the nature of young people’s lives
  - how the developmental stage can vary in motivations, values, sociocultural background
  - the influence of family/peers
  - the influence of prevailing youth cultures
  - the influence of global events and trends
  - the influence of technology

- epidemiology of the health of young people
  - patterns of morbidity and mortality
  - comparisons of health status with that of other age groups

- the effects of the determinants of health on young people
  - individual factors
  - sociocultural factors
  - socioeconomic factors
  - environmental factors

- developmental aspects that affect the health of young people
  - revising roles within relationships
  - clarifying self-identity and self-worth
  - developing self-sufficiency and autonomy
  - establishing education, training and employment pathways
  - establishing personal support structures
  - determining behavioural boundaries.

Students learn to:

- distinguish those aspects of young people’s lives that make them similar and different to the young people of previous generations

- analyse health data for young people and compare with that of other age groups in order to identify the generally positive picture of the health of young people

- identify current areas of ill health that are of greatest prevalence among young people

- examine how a range of factors may adversely affect the health of young people and propose strategies to overcome these factors

- identify the relationship between successfully managing these developmental aspects and health

- think critically about how young people’s priorities and values relate to their health by considering questions such as:
  - is health a priority for young people?
  - what would young people view as the indicators of good health?
To what extent do Australia’s young people enjoy good health?

Students learn about:
- the major health issues that impact on young people
  - mental health problems and illnesses
  - alcohol consumption
  - violence
  - road safety
  - sexual health
  - body image
  - other relevant/emerging health issues, eg gambling, cyber-bullying, party crashes, drink spiking

Students learn to:
- analyse TWO of the major health issues listed by examining:
  - the nature and extent of the major health issue
  - the risk factors and protective factors
  - the sociocultural, socioeconomic and environmental determinants
  - young people most at risk

What skills and actions enable young people to attain better health?

Students learn about:
- skills in attaining better health
  - building self concept
  - developing connectedness and support networks
  - developing resilience and coping skills
  - developing health literacy skills
  - developing communication skills
  - accessing health services
  - becoming involved in community service
  - creating a sense of future
- actions targeting health issues relevant to young people
  - social action
  - legislation and public policy
  - health promotion initiatives.

Students learn to:
- analyse through meaningful and realistic situations how the skills can assist young people to enjoy good health
- critically reflect on their own personal health and health behaviours including both positive and negative influences and indicate future courses of action for better health
- evaluate a range of strategies that have been implemented by government and non-government agencies that target TWO major health issues impacting on young people

Suggested teaching and learning strategies

Critically analyse a range of information sources available to young people on a relevant health issue in terms of accessibility and reliability of information.

Analyse a health promotion program that actively involves young people in its implementation. Identify the level of success of the program and discuss reasons for this.

Design a campaign to raise awareness of the youth health services available in your local area.

Explain how the sociocultural circumstances of young people can impact on health status.
9.4 HSC Option 2: Sport and Physical Activity in Australian Society

This module should occupy approximately 20% of total course time.

Module Description

This option module is concerned with the sociocultural perspectives of sport and physical activity in Australian society. In this module, students investigate how the meanings given to sport and physical activity have changed over time and are different for different groups of people. Students explore how sport, as a major social institution in Australian society, is important in shaping people’s values and beliefs about national identity, gender, and culture.

In this module, students investigate the following critical questions:

- How have meanings about sport and physical activity changed over time?
- What is the relationship between sport and national and cultural identity?
- How does the mass media contribute to people’s understanding, values and beliefs about sport?
- What are the relationships between sport and physical activity and gender?

This option module encourages students to critically analyse how sport both constructs and is produced in the context of particular social values and beliefs. Students discover that sports judged to be important and the kind of participation and participants that are supported are very much a product of the values and beliefs of a society at any one time in its history. Studying this module will assist students to become more critical consumers of media and other cultural messages about sport and physical activity.

Outcomes

A student:
H12 analyses the influence of sociocultural factors on the way people participate in and value physical activity and sport
H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts
### How have meanings about sport and physical activity changed over time?

**Students learn about:**

- the beginnings of modern sport in 19th century England and colonial Australia
  - links with manliness, patriotism and character
  - the meaning of amateur and professional sport
  - women’s historical participation in sport

- sport as a commodity
  - the development of professional sport
  - sport as big business
  - sponsorship, advertising and sport
  - the economics of hosting major sporting events
  - consequences for spectators and participants.

**Students learn to:**

- compare the nature of sport in the 19th century with sport in today’s society. Consider questions such as:
  - how have the meanings of amateur and professional sport changed?
  - how did the meanings of sport differ for different social groups?
  - how did women’s and men’s sports participation differ and why?

- analyse the consequences for various sports as they have adopted a business focus.

### What is the relationship between sport and national and cultural identity?

**Students learn about:**

- Australian sporting identity
  - national and regional identity through sporting achievements
  - government funding, eg the Australian Institute of Sport
  - politics and sports

- the meaning of physical activity and sport to Indigenous Australians
  - traditional activities and sports
  - links between community and identity

- physical activity, sport and cultural identity
  - the role of competition
  - links to cultural identity
  - relationships to health
  - ways of thinking about the body.

**Students learn to:**

- critically examine how sport has been used to promote an Australian national and regional identity, eg Olympic coverage, State of Origin

- identify instances when Australia has used sport for political purposes and evaluate the impact of this on the athletes and the Australian public, eg Moscow Olympics, apartheid boycotts

- investigate how physical activity and sport have influenced the lives and identity of Indigenous Australians

- research physical activities or sports to determine their cultural significance for particular groups.
### How does the mass media contribute to people’s understanding, values and beliefs about sport?

**Students learn about:**
- the relationship between sport and the mass media
  - the representation of sport in the media
  - economic considerations of media coverage and sport
- deconstructing media messages, images and amount of coverage
  - differences in coverage for different sports across various print and electronic media
  - the emergence of extreme sports as entertainment, eg big wave surfing.

**Students learn to:**
- think critically about the impact of the mass media on sport by investigating questions such as:
  - who benefits and in what ways?
  - how does the media influence our understanding of sporting events?
  - how have sports been changed to suit the needs of the media, eg uniforms, rule modifications, structure to accommodate advertising breaks
- analyse the media’s role in giving meanings to sport by considering questions such as:
  - how does the coverage given to particular sports reflect which sports are valued and which ones are not?
  - what metaphors are common in sport, eg football as ‘war’?
  - has the media pushed extreme sports to take excessive risks?

### What are the relationships between sport and physical activity and gender?

**Students learn about:**
- sport as a traditionally male domain
  - sport and the construction of masculinity and femininity
  - implications for participation
  - sponsorship, policy and resourcing
  - the role of the media in constructing meanings around femininity and masculinity in sport
- challenges to the male domain, eg women in traditional male sports.

**Students learn to:**
- apply an understanding about the social construction of gender to explore the ways in which sport reinforces or challenges traditional narrow understandings of gender
- critically analyse the participation rates of males and females in a range of sports and offer explanations for differences. Consider how some forms of activity have come to be traditionally associated with each gender
- examine the debate that surrounds the entry of women into traditional male sports, eg boxing, rugby. Compare this with the entry of men into traditional female sports, eg netball.
Suggested teaching and learning strategies

Interview people of different ages and from different cultures about their experiences of physical activity and sport. Provide a report that links their experiences with research about the history of sport and the meaning of sport for different cultural groups.

Conduct a case study of a sport or physical activity outside of the mainstream of Australian sport, for example tai chi, skating or snowboarding, a martial art, a cultural dance form, ballroom/line dancing, women’s rugby. How do the values and meanings associated with the activity compare with those associated with traditional Australian sports?
9.5 HSC Option 3: Sports Medicine

This module should occupy approximately 20% of total course time

Module Description

This option module is concerned with the specific issues of prevention, assessment, management of and recovery from sports injury. In this module, students examine how the extent and intensity of sports participation relates to the incidence of sports injuries. They explore the range of technical and scientific approaches for maintaining the wellbeing of athletes.

In this module, students research, analyse and debate the merits of current sports medicine approaches. They also explore issues regarding returning to play following injury.

In this module, students investigate the following critical questions:

- How are sports injuries classified and managed?
- How does sports medicine address the demands of specific athletes?
- What role do preventative actions play in enhancing the wellbeing of the athlete?
- How is injury rehabilitation managed?

As a result of studying this module, students will be prepared to minimise their risk of injury in sports settings. It will also provide an introduction to the requirements for adopting productive support roles such as sports trainers.

Outcomes

A student:

H8 explains how a variety of training approaches and other interventions enhance performance and safety in physical activity

H13 selects and applies strategies for the management of injuries and the promotion of safety in sport and physical activity

H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts

H17 selects appropriate options and formulates strategies based on a critical analysis of the factors that affect performance and safe participation
### How are sports injuries classified and managed?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ways to classify sports injuries</td>
<td>• identify specific examples of injuries that reflect each of the classifications</td>
</tr>
<tr>
<td>– direct and indirect</td>
<td></td>
</tr>
<tr>
<td>– soft and hard tissue</td>
<td></td>
</tr>
<tr>
<td>– overuse</td>
<td></td>
</tr>
<tr>
<td>• soft tissue injuries</td>
<td>• manage soft tissue injuries:</td>
</tr>
<tr>
<td>– tears, sprains, contusions</td>
<td>– RICER (Rest, Ice, Compression,</td>
</tr>
<tr>
<td>– skin abrasions, lacerations, blisters</td>
<td>Elevation, Referral)</td>
</tr>
<tr>
<td>– inflammatory response</td>
<td>– immediate treatment of skin injuries</td>
</tr>
<tr>
<td>• hard tissue injuries</td>
<td>• manage hard tissue injuries</td>
</tr>
<tr>
<td>– fractures</td>
<td>– assessment for medical attention</td>
</tr>
<tr>
<td>– dislocation</td>
<td>– immobilisation</td>
</tr>
<tr>
<td>• assessment of injuries</td>
<td>• perform assessment procedures to determine the nature and extent of injury in simulated scenarios.</td>
</tr>
<tr>
<td>– TOTAPS (Talk, Observe, Touch, Active and Passive movement, Skills test).</td>
<td></td>
</tr>
</tbody>
</table>

### How does sports medicine address the demands of specific athletes?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• children and young athletes</td>
<td>• analyse the implications of each of these considerations for the ways young people engage in sport and how each is managed.</td>
</tr>
<tr>
<td>– medical conditions (asthma, diabetes, epilepsy)</td>
<td></td>
</tr>
<tr>
<td>– overuse injuries (stress fractures)</td>
<td></td>
</tr>
<tr>
<td>– thermoregulation</td>
<td></td>
</tr>
<tr>
<td>– appropriateness of resistance training</td>
<td></td>
</tr>
<tr>
<td>• adult and aged athletes</td>
<td>• explain the sports participation options available for aged people with medical conditions</td>
</tr>
<tr>
<td>– heart conditions</td>
<td></td>
</tr>
<tr>
<td>– fractures/bone density</td>
<td></td>
</tr>
<tr>
<td>– flexibility/joint mobility</td>
<td></td>
</tr>
<tr>
<td>• female athletes</td>
<td>• assess the degree to which iron deficiency and bone density affect participation in sport.</td>
</tr>
<tr>
<td>– eating disorders</td>
<td></td>
</tr>
<tr>
<td>– iron deficiency</td>
<td></td>
</tr>
<tr>
<td>– bone density</td>
<td></td>
</tr>
<tr>
<td>– pregnancy.</td>
<td></td>
</tr>
</tbody>
</table>
## What role do preventative actions play in enhancing the wellbeing of the athlete?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• physical preparation</td>
<td>• analyse different sports in order to determine priority preventative strategies and how adequate preparation may prevent injuries</td>
</tr>
<tr>
<td>- pre-screening</td>
<td></td>
</tr>
<tr>
<td>- skill and technique</td>
<td>• critically analyse sports policies, rules and equipment to determine the degree to which they promote safe participation, eg heat rules, rugby union scrum rules</td>
</tr>
<tr>
<td>- physical fitness</td>
<td>• evaluate strategies an athlete could employ to support the body’s temperature regulation mechanisms</td>
</tr>
<tr>
<td>- warm up, stretching and cool down</td>
<td>• analyse the impact of climatic conditions on safe sports participation</td>
</tr>
<tr>
<td>• sports policy and the sports environment</td>
<td></td>
</tr>
<tr>
<td>- rules of sports and activities</td>
<td></td>
</tr>
<tr>
<td>- modified rules for children</td>
<td></td>
</tr>
<tr>
<td>- matching of opponents, eg growth and development, skill level</td>
<td></td>
</tr>
<tr>
<td>- use of protective equipment</td>
<td></td>
</tr>
<tr>
<td>- safe grounds, equipment and facilities</td>
<td></td>
</tr>
<tr>
<td>• environmental considerations</td>
<td></td>
</tr>
<tr>
<td>- temperature regulation (convection, radiation, conduction, evaporation)</td>
<td></td>
</tr>
<tr>
<td>- climatic conditions (temperature, humidity, wind, rain, altitude, pollution)</td>
<td></td>
</tr>
<tr>
<td>- guidelines for fluid intake</td>
<td></td>
</tr>
<tr>
<td>- acclimatisation</td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Note:</strong> Students should understand how the combination of heat and humidity or cold and wind increases the likelihood of hyperthermia and hypothermia respectively.</td>
<td></td>
</tr>
<tr>
<td>• taping and bandaging</td>
<td>• demonstrate taping and bandaging techniques, including taping the ankle, wrist and thumb</td>
</tr>
<tr>
<td>- preventative taping</td>
<td>• evaluate the role taping plays in both the prevention and treatment of injury.</td>
</tr>
<tr>
<td>- taping for isolation of injury</td>
<td></td>
</tr>
<tr>
<td>- bandaging for immediate treatment of injury.</td>
<td></td>
</tr>
</tbody>
</table>

## How is injury rehabilitation managed?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• rehabilitation procedures</td>
<td>• examine and justify rehabilitation procedures used for a range of specific injuries, eg hamstring tear, shoulder dislocation</td>
</tr>
<tr>
<td>- progressive mobilisation</td>
<td></td>
</tr>
<tr>
<td>- graduated exercise (stretching, conditioning, total body fitness)</td>
<td></td>
</tr>
<tr>
<td>- training</td>
<td></td>
</tr>
<tr>
<td>- use of heat and cold</td>
<td></td>
</tr>
</tbody>
</table>
- return to play
  - indicators of readiness for return to play (pain free, degree of mobility)
  - monitoring progress (pre-test and post-test)
  - psychological readiness
  - specific warm-up procedures
  - return to play policies and procedures
  - ethical considerations, e.g. pressure to participate, use of painkillers.

- research and evaluate skill and other physical tests that could be used to indicate readiness to return to play

- critically examine policies and procedures that regulate the timing of return to play, considering questions such as:
  - why aren’t such policies applied to all sports?
  - who should have ultimate responsibility for deciding if an athlete returns to competition?
  - should athletes be allowed to use painkillers in order to compete when injured?

**Suggested teaching and learning strategies**

Develop a set of principles for the safe participation of children in sport. Justify the effectiveness of the principles for dealing with the major forms of injuries experienced by this group.

Prepare a written report on how sports injuries are classified and detail the procedures to be used when managing one particular type of injury.
9.6  HSC Option 4: Improving Performance

This module should occupy approximately 20% of total course time

Module Description

In this module, students investigate approaches to the physiological preparation and skill development of athletes. Students will experience and analyse a variety of training methods and look at the application of these methods to improving performance. The effects of planning on performance and ethical considerations relating to improving athletes’ performance are also examined.

In this module, students investigate the following critical questions:

- How do athletes train for improved performance?
- What are the planning considerations for improving performance?
- What ethical issues are related to improving performance?

This module provides students with knowledge and skills necessary to improve their performance as well as enabling them to apply the concepts to various coaching contexts.

Outcomes

A student:

H7 explains the relationship between physiology and movement potential
H8 explains how a variety of training approaches and other interventions enhance performance and safety in physical activity
H9 explains how movement skill is acquired and appraised
H10 designs and implements training plans to improve performance
H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts
H17 selects appropriate options and formulates strategies based on a critical analysis of the factors that affect performance and safe participation.
How do athletes train for improved performance?

Students learn about:

- strength training
  - resistance training, eg elastic, hydraulic
  - weight training, eg plates, dumbbells
  - isometric training

- aerobic training
  - continuous/uniform
  - fartlek
  - long interval

- anaerobic training (power and speed)
  - developing power through resistance/weight training
  - plyometrics
  - short interval

- flexibility training
  - static
  - dynamic
  - ballistic

- skill training
  - drills practice
  - modified and small-sided games
  - games for specific outcomes, eg decision-making, tactical awareness.

Students learn to:

- analyse TWO of the training types by drawing on current and reliable sources of information to:
  - examine the types of training methods and how they best suit specific performance requirements
  - design a training program
  - describe how training adaptations can be measured and monitored
  - identify safe and potentially harmful training procedures.

What are the planning considerations for improving performance?

Students learn about:

- initial planning considerations
  - performance and fitness needs (individual, team)
  - schedule of events/competitions
  - climate and season

- planning a training year (periodisation)
  - phases of competition (pre-season, in-season and off-season phases)
  - subphases (macro and microcycles)
  - peaking
  - tapering
  - sport-specific subphases (fitness components, skill requirements)

Students learn to:

- describe the specific considerations of planning for performance in events/competitions. How would this planning differ for elite athletes and recreational/amateur participants?

- develop and justify a periodisation chart of the fitness and skill-specific requirements of a particular sport.
### Personal Development, Health and Physical Education Stage 6 Syllabus

- **elements to be considered when designing a training session**
  - health and safety considerations
  - providing an overview of the session to athletes (goal-specific)
  - warm up and cool down
  - skill instruction and practice
  - conditioning
  - evaluation

- **planning to avoid overtraining**
  - amount and intensity of training
  - physiological considerations, eg lethargy, injury
  - psychological considerations, eg loss of motivation.

- **examine different methods of structuring training sessions**

- **design and implement a training session for a specific event. Evaluate the session by considering questions such as:**
  - did the activities match the abilities of the group?
  - what was the reaction of the group?
  - how could the session be modified?

### What ethical issues are related to improving performance?

**Students learn about:**

- **use of drugs**
  - the dangers of performance enhancing drug use, eg physical effects, loss of reputation, sponsorship and income
  - for strength (human growth hormone, anabolic steroids)
  - for aerobic performance (EPO)
  - to mask other drugs (diuretics, alcohol)
  - benefits and limitations of drug testing

**Students learn to:**

- **justify the reasons drugs are considered to be unethical and carry a range of risks for the athlete**

- **argue issues related to drug testing such as:**
  - at what level of competition should drug testing be introduced?
  - which drugs should be tested for?
  - what are the pros and cons of drug testing?
  - what should be the consequences of drug use?

**Teacher Note:** Students need only a general understanding of the performance-related effects of, and the harm associated with, using drugs. Ethical considerations – such as fair play versus cheating, whether the drug use is for personal success or because sport is 'big business' – need to be explored.

- **use of technology**
  - training innovation, eg lactate threshold testing, biomechanical analysis
  - equipment advances, eg swimsuits, golf ball

- **describe how technology has been used to improve performance**

- **argue ethical issues related to technology use in sport such as:**
  - has technology gone too far?
  - has access to technology created unfair competition?
**Suggested teaching and learning strategies**

Consider case studies of two athletes in the same sport. Analyse their training methods. Highlight similarities and differences in their approaches.

Critically analyse two articles about different methods of training. Outline the methods presented, their advantages and limitations. Indicate the method you consider would be most effective, providing reasons for your choice.

Design and implement a training session for a team that has just begun its competitive season.
9.7  HSC Option 5: Equity and Health

This module should occupy approximately 20% of total course time.

Module Description

This option module is concerned with the achievement of health for all and the actions necessary to realise this goal. In this module, students build on their understanding of equity and social justice which were introduced in the core module Health Priorities in Australia. They examine the populations that experience health inequities and critically analyse social, cultural, economic and political factors that impact on the health status of these populations. Students think critically in order to discern actions that work towards reducing the gap in health status between populations.

As the major focus of this module, students conduct an examination of two populations experiencing significant health inequities.

In this module, students investigate the following critical questions:

- Why do inequities exist in the health of Australians?
- What inequities are experienced by population groups in Australia?
- How may the gap in health status of populations be bridged?

Outcomes

A student:

- H1 describes the nature, and justifies the choice, of Australia’s health priorities
- H2 analyses and explains the health status of Australians in terms of current trends and groups most at risk
- H3 analyses the determinants of health and health inequities
- H5 explains the different roles and responsibilities of individuals, communities and governments in addressing Australia’s health priorities
- H14 argues the benefits of health-promoting actions and choices that promote social justice
- H15 critically analyses key issues affecting the health of Australians and proposes ways of working towards better health for all
- H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts.
Why do inequities exist in the health of Australians?

Students learn about:
- factors that create health inequities
  - daily living conditions
  - quality of early years of life
  - access to services and transport
  - socioeconomic factors
  - social attributes, eg social exclusion, discrimination
  - government policies and priorities, eg health, economic, social.

Students learn to:
- identify how these factors contribute to the inequities experienced by different population groups in Australia
- recognise the potential for populations to be exposed to multiple risk factors contributing to health inequities and the implications for managing the inequities.

What inequities are experienced by population groups in Australia?

Students learn about:
- populations experiencing health inequities
  - Aboriginal and Torres Strait Islander peoples
  - homeless
  - people living with HIV/AIDS
  - incarcerated
  - aged
  - culturally and linguistically diverse backgrounds
  - unemployed
  - geographically remote populations
  - people with disabilities.

Students learn to:
- challenge generalisations about populations experiencing health inequities
- analyse the health inequities experienced by TWO of the population groups by:
  - examining health data to determine areas of inequity and the degree to which the gap is reducing or increasing
  - analysing the impact of the health determinants
  - examining the media's role in influencing social attitudes and public policy
  - evaluating government interventions.

How may the gap in health status of populations be bridged?

Students learn about:
- funding to improve health
  - funding for health
  - funding for specific populations
  - limited resources

Students learn to:
- think critically about the issues that influence health funding by considering questions such as:
  - does funding solve inequities?
  - will improving the health of all Australians reduce the gap?
  - should funding go where there is the greatest chance of success or to the area of greatest need? Is it possible to do both?
- actions that improve health
  - enabling (using knowledge and skills for change)
  - mediating (working for consensus)
  - advocating (speaking up for specific groups, their needs and concerns)

- explain the nature of enabling, mediating and advocating processes when working for sustainable improvements for disadvantaged groups

- a social justice framework for addressing health inequities
  - empowering individuals in disadvantaged circumstances
  - empowering disadvantaged communities
  - improving access to facilities and services
  - encouraging economic and cultural change

- apply the social justice framework to the development of a plan to address the causal factors of an inequity

- characteristics of effective health promotion strategies
  - working with the target group in program design and implementation
  - ensuring cultural relevance and appropriateness
  - focusing on skills, education and prevention
  - supporting the whole population while directing extra resources to those in high risk groups
  - intersectoral collaboration

- distinguish those characteristics that contribute to the sustainability of health strategies

- analyse the characteristics of a specific health promotion strategy in order to predict its potential for success.

### Suggested teaching and learning strategies

Prepare a critique of the major factors contributing to a particular health inequity.

Analyse the appropriateness of a current health promotion strategy targeting a particular health inequity.

Formulate a set of recommendations for future directions in addressing the health inequities of a particular group.
10 Course Requirements

The *PDHPE Stage 6 Syllabus* includes a Preliminary course of 120 hours (indicative time) and a HSC course of 120 hours (indicative time).

There is no prerequisite for the Preliminary course. Completion of the Preliminary course is a prerequisite to study of the HSC course.
11 Post-school Opportunities

The study of PDHPE Stage 6 provides students with knowledge, understanding and skills that form a valuable foundation for a range of courses at university and other tertiary institutions.

In addition, the study of PDHPE Stage 6 assists students to prepare for employment and full and active participation as citizens. In particular, there are opportunities for students to gain recognition in vocational education and training. Teachers and students should be aware of these opportunities.

11.1 Recognition of Student Achievement in Vocational Education and Training (VET)

Wherever appropriate, the skills and knowledge acquired by students in their study of HSC courses should be recognised by industry and training organisations. Recognition of student achievement means that students who have satisfactorily completed HSC courses will not be required to repeat their learning in courses in TAFE NSW or other Registered Training Organisations (RTOs).

Registered Training Organisations, such as TAFE NSW, provide industry training and issue qualifications within the Australian Qualifications Framework.

The degree of recognition available to students in each subject is based on the similarity of outcomes between HSC courses and industry training packages endorsed within the Australian Qualifications Framework (AQF). Training packages are documents that link an industry’s competency standards to AQF qualifications. More information about industry training packages can be found on the National Training Information Service (NTIS) website (www.ntis.gov.au).

Recognition by TAFE NSW

TAFE NSW conducts courses in a wide range of industry areas, as outlined each year in the TAFE NSW Handbook. Under current arrangements, the recognition available to students of PDHPE in relevant courses conducted by TAFE is described in the HSC/TAFE Credit Transfer Guide. This guide is produced by the Board of Studies and TAFE NSW and is distributed annually to all schools and colleges. Teachers should refer to this guide and be aware of the recognition available to their students through the study of PDHPE Stage 6. This information can be found on the TAFE NSW website (www.tafensw.edu.au/mchoice).

Recognition by other Registered Training Organisations

Students may also negotiate recognition into a training package qualification with another Registered Training Organisation. Each student will need to provide the RTO with evidence of satisfactory achievement in PDHPE Stage 6 so that the degree of recognition available can be determined.
12 Assessment and Reporting

Advice on appropriate assessment practice in relation to the Personal Development, Health and Physical Education syllabus is contained in *Assessment and Reporting in Personal Development, Health and Physical Education Stage 6*. That document provides general advice on assessment in Stage 6 as well as the specific requirements for the Preliminary and HSC courses. The document contains:

- suggested components and weightings for the internal assessment of the Preliminary course
- mandatory components and weightings for the internal assessment of the HSC course
- the HSC examination specifications, which describe the format of the external HSC examination.

The document and other resources and advice related to assessment in Stage 6 Personal Development, Health and Physical Education are available on the Board’s website at [www.boardofstudies.nsw.edu.au/syllabus_hsc](http://www.boardofstudies.nsw.edu.au/syllabus_hsc)
13 Glossary

**advocacy**
A combination of individual and social actions aimed at gaining support and commitment for a particular goal or program.

**blood borne viruses**
Used to refer to Hepatitis B and C.

**critical approach**
This question-based approach to the study of PDHPE involves proposing a range of solutions to the problems being studied. It may involve consideration of alternatives to practices that have been accepted or in place for extended periods of time.

**determinants of health**
The range of personal, social, economic and environmental factors that determine the health status of individuals and populations.

**dispossession**
The removal of possessions, particularly land.

**enabling**
Action in partnership with individuals and groups, providing resources and support to empower them to promote and protect their health.

**EPO**
The drug epoetin is a synthetic version of human erythropoieten (EPO). The drug stimulates the bone marrow to produce red blood cells. It is considered as blood doping and its use is banned in sports.

**equity**
Equity means that resources are allocated in accordance with the needs of individuals and populations with the desired goal of equality of outcomes.

**FITT Principle**
A framework for developing fitness programs that emphasise the variables Frequency, Intensity, Type of exercise and Time or duration of exercise.

**health**
A state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.

**health literacy**
The ability to understand and interpret health information and services and utilise this information in ways that promote and maintain good health.

**health promotion**
The process of enabling people to increase control over and to improve their health.

**health status**
The health of an individual or population measured against an identifiable standard.

**intersectoral collaboration**
Different sectors of society work together in a coordinated manner in order to tackle a particular issue or achieve an agreed outcome. The combined effort is more effective and the outcome more sustainable than the health sector working in isolation.

**Jakarta Declaration**
The declaration resulted from the World Health Organisation’s 4th International Conference on Health Promotion. The declaration raises new health challenges, affirms the Ottawa Charter action areas and establishes the following priorities:
- promote social responsibility for health
- increase investments for health development
- consolidate and expand partnerships for health
- increase community capacity and empower the individual
- secure an infrastructure for health promotion.
mediation  The process of bringing different interests and parties together to a point of accepting solutions that promote health

new public health  A model of health recognising the dual role of lifestyle and living conditions as determinants of health status. It involves establishing programs, policies and services that create environments that support health

Ottawa Charter  The charter represents the views of the World Health Organisation’s First International Conference on Health Promotion. It outlines prerequisites of health and the importance of enabling, mediating and advocating for health. It outlines 5 essential actions for health promotion:
- build healthy public policy
- create supportive environments
- strengthen community action
- develop personal skills
- reorient health services

PNF  Proprioceptive Neuromuscular Functioning is a form of flexibility training. It involves a phase of pushing away from the direction of stretch against resistance. This is followed by a period of relaxation with gentle reversing of the resistance to push along the line of stretch increasing the stretch beyond its normal range

reorienting health services  Moving the focus of the health sector towards health promotion, prevention and supporting the wellbeing of the whole person to complement traditional roles of diagnosis, treatment and rehabilitation. The health sector is encouraged to also adopt a key role in coordinating other sectors to work for health

resilience  The process and capacity that allows individuals to successfully adapt to challenges in their lives. Resilience is related to the development of personal life skills, such as social problem-solving, assertiveness, negotiation, social support accessing skills and a sense of connectedness

settings  Places or social contexts at which populations engage in daily life. These settings present as potential sites for health-promotion activity that targets the relevant populations

social action  Deliberate activity that is aimed at enhancing the wellbeing of others and oneself. Based on the theory that the nature of society is a product of individuals acting collectively. In the school setting this may include, for example, students participating in decision-making, developing peer support networks, or promoting drug free lifestyles

social construct  A concept that has meaning and shared understandings based on people’s ways of seeing, interpreting, interrelating and interacting
<table>
<thead>
<tr>
<th><strong>social justice</strong></th>
<th>A value that favours measures that aim at decreasing or eliminating inequity; promoting inclusiveness of diversity; and establishing environments that are supportive of all people</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>sociocultural</strong></td>
<td>Related to social and cultural factors that impact on health and physical activity issues.</td>
</tr>
<tr>
<td><strong>strategic non-intervention</strong></td>
<td>The deliberate decision to monitor rather than intervene when people are faced with a challenge or problem. This allows for the development of resourcefulness, problem-solving skills and personal growth</td>
</tr>
<tr>
<td><strong>supportive environments</strong></td>
<td>The places people live, work and play that protect people from threats to health and that increase their ability to make health-promoting choices.</td>
</tr>
<tr>
<td><strong>trait and state anxiety</strong></td>
<td>One’s normal disposition to be anxious generally (trait) vs one’s level of anxiety in a particular situation (state)</td>
</tr>
</tbody>
</table>