Dungog High School

2014

Teaching and Learning Document

(Student copy)

PD/H/PE

Yr 12 – HSC Course
Contents

1. Rationale
2. Course Aims and Objectives
3. Course Structure/Overview
4. Key Competencies
5. Objectives and Outcomes
6. Scope and Sequence
7. Assessment Structure
8. Syllabus: Core 1
   Core 2
   Option 4
   Option 5
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.
**Aims**
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.

**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.
# Course Structure

## 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>
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.
### Table of Objectives and Outcomes

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

<table>
<thead>
<tr>
<th>Objectives</th>
<th>HSC Course Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student develops:</td>
<td>A student:</td>
</tr>
<tr>
<td>• knowledge and understanding of the factors that affect health</td>
<td>H1 describes the nature and justifies the choice of Australia’s health priorities</td>
</tr>
<tr>
<td></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>H3 analyses the determinants of health and health inequities</td>
</tr>
<tr>
<td>• a capacity to exercise influence over personal and community health outcomes</td>
<td>H4 argues the case for health promotion based on the Ottawa Charter</td>
</tr>
<tr>
<td></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>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>HSC Course Outcomes</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• knowledge and understanding about the way the body moves</td>
<td>H7 explains the relationship between physiology and movement potential</td>
</tr>
<tr>
<td></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>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>H10 designs and implements training plans to improve performance</td>
</tr>
<tr>
<td></td>
<td>H11 designs psychological strategies and nutritional plans in response to individual performance needs</td>
</tr>
<tr>
<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>H13 selects and applies strategies for the management of injuries and the promotion of safety in sport and physical activity (Option 3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>HSC Course Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• an ability to apply the skills of critical thinking, research and analysis</td>
<td>H14 argues the benefits of health-promoting actions and choices that promote social justice</td>
</tr>
<tr>
<td></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>H16 devises methods of gathering, interpreting and communicating information about health and physical activity concepts</td>
</tr>
<tr>
<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>
# Term Four 2013

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course introduction and HSC Skills</td>
</tr>
<tr>
<td>2</td>
<td><strong>CORE 1</strong>&lt;br&gt;(11 weeks)&lt;br&gt;How are priority issues for Australia's health identified?&lt;br&gt;• measuring health status&lt;br&gt;  – role of epidemiology&lt;br&gt;  – measures of epidemiology (mortality, infant mortality, morbidity, life expectancy)</td>
</tr>
<tr>
<td>3</td>
<td>• Interpreting statistical trends and graphs&lt;br&gt;  • identifying priority health issues&lt;br&gt;    – social justice principles&lt;br&gt;    – priority population groups&lt;br&gt;    – prevalence of condition&lt;br&gt;    – potential for prevention and early intervention&lt;br&gt;    – costs to the individual and community</td>
</tr>
<tr>
<td>4</td>
<td>What are the priority issues for improving Australia’s health?&lt;br&gt;• groups experiencing health inequities&lt;br&gt;  – Aboriginal and Torres Strait Islander peoples&lt;br&gt;  – people in rural and remote areas</td>
</tr>
<tr>
<td>5</td>
<td>• high levels of preventable chronic disease, injury and mental health problems&lt;br&gt;  – cardiovascular disease (CVD)&lt;br&gt;  – cancer (skin, breast, lung)&lt;br&gt;  – respiratory disease</td>
</tr>
<tr>
<td>6</td>
<td><strong>Assessment 1 Issued</strong>&lt;br&gt;a growing and ageing population&lt;br&gt;  – healthy ageing&lt;br&gt;  – increased population living with chronic disease and disability&lt;br&gt;  – demand for health services and workforce shortages&lt;br&gt;  – availability of carers and volunteers.</td>
</tr>
<tr>
<td>7</td>
<td><strong>What role do health care facilities and services play in achieving better health for all Australians?</strong>&lt;br&gt;• health care in Australia&lt;br&gt;  – range and types of health facilities and services&lt;br&gt;  – responsibility for health facilities and services</td>
</tr>
</tbody>
</table>
- 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

10
- 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

11
**What actions are needed to address Australia's health priorities?**
- 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

---

**Term One 2014**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>the Ottawa Charter in action</td>
</tr>
<tr>
<td>2 <strong>OPTION 5 (7 weeks)</strong></td>
<td>Equity and Health</td>
</tr>
<tr>
<td></td>
<td><strong>Why do inequities exist in the health of Australians?</strong></td>
</tr>
<tr>
<td></td>
<td>- factors that create health inequities</td>
</tr>
<tr>
<td></td>
<td>- daily living conditions</td>
</tr>
<tr>
<td></td>
<td>- quality of early years of life</td>
</tr>
<tr>
<td></td>
<td>- access to services and transport</td>
</tr>
<tr>
<td></td>
<td>- socioeconomic factors</td>
</tr>
<tr>
<td></td>
<td>- social attributes, eg social exclusion, discrimination</td>
</tr>
<tr>
<td></td>
<td>- government policies and priorities, eg health, economic, social.</td>
</tr>
<tr>
<td>3</td>
<td>What inequities are experienced by population groups in Australia?</td>
</tr>
<tr>
<td>4</td>
<td>- populations experiencing health inequities</td>
</tr>
<tr>
<td></td>
<td>- Aboriginal and Torres Strait Islander peoples</td>
</tr>
<tr>
<td></td>
<td>- homeless</td>
</tr>
<tr>
<td></td>
<td>- people living with HIV/AIDS</td>
</tr>
<tr>
<td></td>
<td>- incarcerated</td>
</tr>
<tr>
<td></td>
<td>- aged</td>
</tr>
<tr>
<td></td>
<td>- culturally and linguistically diverse backgrounds</td>
</tr>
<tr>
<td></td>
<td>- unemployed</td>
</tr>
<tr>
<td></td>
<td>- geographically remote populations</td>
</tr>
<tr>
<td></td>
<td>- people with disabilities.</td>
</tr>
</tbody>
</table>
### 5 How may the gap in health status of populations be bridged?
- funding to improve health
  - funding for health
  - funding for specific populations
  - limited resources

### 6 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)

### 7 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

### 8 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

### 9 Core 2 (11 weeks) How does training affect performance?
- energy systems
  - alactacid system (ATP/PC)
  - lactic acid system
  - aerobic system

### 10 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

#### Year 12 Half Yearly examinations start this week

### 11 Year 12 Half Yearly examinations finish this week

The above work may be taught prior or post to the Half Yearly period

---

### Term Two 2014

<table>
<thead>
<tr>
<th>WEEK</th>
<th>FOCUS QUESTION</th>
</tr>
</thead>
</table>
| 1    | • 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

**2**

How can psychology affect performance?
- motivation
  - positive and negative
  - intrinsic and extrinsic
- anxiety and arousal
  - trait and state anxiety
  - sources of stress
  - optimum arousal

**3**

- psychological strategies to enhance motivation and manage anxiety
  - concentration/attention skills (focusing)
  - mental rehearsal/visualisation/imagery
  - relaxation techniques
  - goal-setting.

**4**

Assessment 2 issued
How can nutrition and recovery strategies affect performance?
- nutritional considerations
  - pre-performance, including carbohydrate loading
  - during performance
  - post-performance

**5**

- supplementation
  - vitamins/minerals
  - protein
  - caffeine
  - creatine products

**6**

- recovery strategies
  - physiological strategies, eg cool down, hydration
  - neural strategies, eg hydrotherapy, massage
  - tissue damage strategies, eg cryotherapy
  - psychological strategies, eg relaxation.

**7**

How does the acquisition of skill affect performance?
- stages of skill acquisition
  - cognitive
  - associative
  - autonomous

- characteristics of the learner, eg personality, heredity, confidence, prior experience, ability

**8**

- 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
### Assessment 3 Issued

- 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

### Term Three 2014

<table>
<thead>
<tr>
<th>WEEK</th>
<th>FOCUS QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improving Performance How do athletes train for improved performance?</td>
</tr>
</tbody>
</table>
|      | - 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  
|      | - flexibility training  
|      |  - static  
|      |  - dynamic  
|      |  - ballistic  
|      | - skill training  
|      |  - drills practice  
|      |  - modified and small-sided games  
|      |  - games for specific outcomes, eg decision-making, tactical awareness  
|      | - 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)  
|      | - 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  
| 2    | - flexibility training  
|      |  - static  
|      |  - dynamic  
|      |  - ballistic  
| 3    | - initial planning considerations  
|      |  - performance and fitness needs (individual, team)  
|      |  - schedule of events/competitions  
|      |  - climate and season  
| 4    | - 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)  
| 5    | - 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  

<table>
<thead>
<tr>
<th>6</th>
<th><strong>Trial Examinations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td><strong>What ethical issues are related to improving performance?</strong></td>
</tr>
<tr>
<td>8</td>
<td>• use of drugs</td>
</tr>
<tr>
<td>9</td>
<td>• the dangers of performance enhancing drug use, eg physical effects, loss of reputation, sponsorship and income</td>
</tr>
<tr>
<td></td>
<td>• for strength (human growth hormone, anabolic steroids)</td>
</tr>
<tr>
<td></td>
<td>• for aerobic performance (EPO)</td>
</tr>
<tr>
<td></td>
<td>• to mask other drugs (diuretics, alcohol)</td>
</tr>
<tr>
<td></td>
<td>• benefits and limitations of drug testing</td>
</tr>
<tr>
<td></td>
<td>• use of technology</td>
</tr>
<tr>
<td></td>
<td>• training innovation, eg lactate threshold testing, biomechanical analysis</td>
</tr>
<tr>
<td></td>
<td>equipment advances, eg swimsuits, golf ball</td>
</tr>
<tr>
<td>10</td>
<td>This week is to cover for disruptions throughout the year and for the purpose of examination preparation</td>
</tr>
<tr>
<td>Component</td>
<td>Task 1</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>Knowledge and understanding of</td>
<td>10</td>
</tr>
<tr>
<td>• factors that affect health</td>
<td></td>
</tr>
<tr>
<td>• the way the body moves</td>
<td></td>
</tr>
<tr>
<td>Skills in:</td>
<td>5</td>
</tr>
<tr>
<td>• influencing personal and community health</td>
<td></td>
</tr>
<tr>
<td>• taking action to improve participation and performance in physical activity.</td>
<td></td>
</tr>
<tr>
<td>Skills in critical thinking, research and analysis</td>
<td>5</td>
</tr>
</tbody>
</table>

| Marks | 20 | 15 | 20 | 15 | 30 | 100 |
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
• 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

• 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

• 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.

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

What role do health care facilities and services play in achieving better health for all Australians?

Students learn about:

• 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

Students learn to:

• 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, e.g., 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
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

How can psychology affect performance?

Students learn about:
- motivation
  - positive and negative
  - intrinsic and extrinsic

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

- 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?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>nutritional considerations</td>
<td>compare the dietary requirements of athletes in different sports considering pre-, during and post-performance needs</td>
</tr>
<tr>
<td>- pre-performance, including carbohydrate loading</td>
<td>critically analyse the evidence for and against supplementation for improved performance</td>
</tr>
<tr>
<td>- during performance</td>
<td>research recovery strategies to discern their main features and proposed benefits to performance</td>
</tr>
<tr>
<td>- post-performance</td>
<td></td>
</tr>
<tr>
<td>supplementation</td>
<td></td>
</tr>
<tr>
<td>- vitamins/minerals</td>
<td></td>
</tr>
<tr>
<td>- protein</td>
<td></td>
</tr>
<tr>
<td>- caffeine</td>
<td></td>
</tr>
<tr>
<td>- creatine products</td>
<td></td>
</tr>
<tr>
<td>recovery strategies</td>
<td></td>
</tr>
<tr>
<td>- physiological strategies, eg cool down, hydration</td>
<td></td>
</tr>
<tr>
<td>- neural strategies, eg hydrotherapy, massage</td>
<td></td>
</tr>
<tr>
<td>- tissue damage strategies, eg cryotherapy</td>
<td></td>
</tr>
<tr>
<td>- psychological strategies, eg relaxation</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>stages of skill acquisition</td>
<td>examine the stages of skill acquisition by participating in the learning of a new skill, eg juggling, throwing with the non-dominant arm</td>
</tr>
<tr>
<td>- cognitive</td>
<td>describe how the characteristics of the learner can influence skill acquisition and the performance of skills</td>
</tr>
<tr>
<td>- associative</td>
<td></td>
</tr>
<tr>
<td>- autonomous</td>
<td></td>
</tr>
<tr>
<td>characteristics of the learner, eg personality, heredity, confidence, prior experience, ability</td>
<td></td>
</tr>
</tbody>
</table>
- 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
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?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• strength training</td>
<td>• analyse TWO of the training types by drawing on current and reliable sources of information to:</td>
</tr>
<tr>
<td>− resistance training, eg elastic, hydraulic</td>
<td>− examine the types of training methods and how they best suit specific performance requirements</td>
</tr>
<tr>
<td>− weight training, eg plates, dumbbells</td>
<td>− design a training program</td>
</tr>
<tr>
<td>− isometric training</td>
<td>− describe how training adaptations can be measured and monitored</td>
</tr>
<tr>
<td>• aerobic training</td>
<td>− identify safe and potentially harmful training procedures.</td>
</tr>
<tr>
<td>− continuous/uniform</td>
<td></td>
</tr>
<tr>
<td>− fartlek</td>
<td></td>
</tr>
<tr>
<td>− long interval</td>
<td></td>
</tr>
<tr>
<td>• anaerobic training</td>
<td></td>
</tr>
<tr>
<td>− developing power through resistance/weight training</td>
<td></td>
</tr>
<tr>
<td>− plyometrics</td>
<td></td>
</tr>
<tr>
<td>− short interval</td>
<td></td>
</tr>
<tr>
<td>• flexibility training</td>
<td></td>
</tr>
<tr>
<td>− static</td>
<td></td>
</tr>
<tr>
<td>− dynamic</td>
<td></td>
</tr>
<tr>
<td>− ballistic</td>
<td></td>
</tr>
<tr>
<td>• skill training</td>
<td></td>
</tr>
<tr>
<td>− drills practice</td>
<td></td>
</tr>
<tr>
<td>− modified and small-sided games</td>
<td></td>
</tr>
<tr>
<td>− games for specific outcomes, eg decision-making, tactical awareness.</td>
<td></td>
</tr>
<tr>
<td>− sport-specific subphases (fitness components, skill requirements)</td>
<td></td>
</tr>
</tbody>
</table>

### What are the planning considerations for improving performance?

<table>
<thead>
<tr>
<th>Students learn about:</th>
<th>Students learn to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• initial planning considerations</td>
<td>• describe the specific considerations of planning for performance in events/competitions. How would this planning differ for elite athletes and recreational/amateur participants?</td>
</tr>
<tr>
<td>− performance and fitness needs (individual, team)</td>
<td></td>
</tr>
<tr>
<td>− schedule of events/competitions</td>
<td></td>
</tr>
<tr>
<td>− climate and season</td>
<td></td>
</tr>
<tr>
<td>• planning a training year (periodisation)</td>
<td>• develop and justify a periodisation chart of the fitness and skill-specific requirements of a particular sport.</td>
</tr>
<tr>
<td>− phases of competition (pre-season, in-season and off-season phases)</td>
<td></td>
</tr>
<tr>
<td>− subphases (macro and microcycles)</td>
<td></td>
</tr>
<tr>
<td>− peaking</td>
<td></td>
</tr>
<tr>
<td>− tapering</td>
<td></td>
</tr>
<tr>
<td>− sport-specific subphases (fitness components, skill requirements)</td>
<td></td>
</tr>
</tbody>
</table>
- 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?

- analyse overtraining by considering questions such as:
  - how much training is too much?
  - how do you identify an overtrained athlete?
  - what do you do if you identify an overtrained athlete?
  - how can overtraining be avoided?

**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?
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)

- 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

- 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
  - inter-sectoral collaboration

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

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

- 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.