

HSC PDHPE REVISION ACTIVITY

You will be provided with a small exercise revision book. Inside this book will be a complete reference to the entire objective 'Learn to' questions from each core and option studied from the current PDHPE syllabus. There are 42 questions highlighted.

Student Expectations:

1. Cut and paste in each of the HIGHLIGHTED 'learn about' and 'learn to' syllabus points at the top of a page in syllabus order. Leave 1-3 pages depending on the expected length of the answer.
2. Over the next 2 terms students will complete at least two (2) questions per week, to be checked each Monday. After the Trial HSC students will complete one (1) question in class per lesson. One (1) or two (2) questions will be given for homework depending on the time before our next lesson.
3. Bring your own textbook to each lesson until this is completed.
4. If absent from class, you will be expected keep up the pace of work outlined in number 2.

The results of this activity will only be as good as the concentrated time you put into it.

A+



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
- 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.

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, 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

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

Students learn to:

- evaluate performance scenarios to

- positive and negative
- intrinsic and extrinsic

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.

Do 1-2 form each type.

How does the acquisition of skill affect performance?

Students learn about:

- stages of skill acquisition
 - cognitive
 - associative
 - autonomous

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

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

- 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

Outline the dash points below only

- 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

Refer to the difference between gymnastics floor routine and 100m sprint

How are sports injuries classified and managed?

Students learn about:

- ways to classify sports injuries
 - direct and indirect
 - soft and hard tissue
 - overuse
- soft tissue injuries
 - tears, sprains, contusions
 - skin abrasions, lacerations, blisters
 - inflammatory response
- hard tissue injuries
 - fractures
 - dislocation
- assessment of injuries
 - TOTAPS (Talk, Observe, Touch, Active and Passive movement, Skills test).

Students learn to:

- identify specific examples of injuries that reflect each of the classifications
- manage soft tissue injuries:
 - RICER (Rest, Ice, Compression, Elevation, Referral)
 - immediate treatment of skin injuries
- manage hard tissue injuries
 - assessment for medical attention
 - immobilisation
- perform assessment procedures to determine the nature and extent of injury in simulated scenarios.

How does sports medicine address the demands of specific athletes?

Students learn about:

- children and young athletes
 - medical conditions (asthma, diabetes, epilepsy)
 - overuse injuries (stress fractures)
 - thermoregulation
 - appropriateness of resistance training
- adult and aged athletes
 - heart conditions
 - fractures/bone density
 - flexibility/joint mobility
- female athletes
 - eating disorders
 - iron deficiency
 - bone density
 - pregnancy.

Students learn to:

- analyse the implications of each of these considerations for the ways young people engage in sport and how each is managed.
- explain the sports participation options available for aged people with medical conditions
- assess the degree to which iron deficiency and bone density affect participation in sport.

What role do preventative actions play in enhancing the wellbeing of the athlete?

Students learn about:

- physical preparation
 - pre-screening
 - skill and technique
 - physical fitness
 - warm up, stretching and cool down
- sports policy and the sports environment
 - rules of sports and activities
 - modified rules for children
 - matching of opponents, eg growth and development, skill level
 - use of protective equipment
 - safe grounds, equipment and facilities
- environmental considerations
 - temperature regulation (convection, radiation, conduction, evaporation)
 - climatic conditions (temperature, humidity, wind, rain, altitude, pollution)
 - guidelines for fluid intake
 - acclimatisation

Students learn to:

- analyse different sports in order to determine priority preventative strategies and how adequate preparation may prevent injuries
- critically analyse sports policies, rules and equipment to determine the degree to which they promote safe participation, eg heat rules, rugby union scrum rules
- evaluate strategies an athlete could employ to support the body's temperature regulation mechanisms
- analyse the impact of climatic conditions on safe sports participation

Teacher Note: Students should understand how the combination of heat and humidity or cold and wind increases the likelihood of hyperthermia and hypothermia respectively.

- taping and bandaging
 - preventative taping
 - taping for isolation of injury
 - bandaging for immediate treatment of injury.

- demonstrate taping and bandaging techniques, including taping the ankle, wrist and thumb
- evaluate the role taping plays in both the prevention and treatment of injury.

How is injury rehabilitation managed?

Students learn about:

- rehabilitation procedures
 - progressive mobilisation
 - graduated exercise (stretching, conditioning, total body fitness)
 - training
 - use of heat and cold

Students learn to:

- examine and justify rehabilitation procedures used for a range of specific injuries, eg hamstring tear, shoulder dislocation

- 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, eg 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?

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

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.

- tapering
- sport-specific subphases (fitness components, skill requirements)

- | | |
|---|--|
| <ul style="list-style-type: none"> ● elements to be considered when designing a training session <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - amount and intensity of training - physiological considerations, eg lethargy, injury - psychological considerations, eg loss of motivation. | <ul style="list-style-type: none"> ● 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: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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?