

Course Title	Sports Science	Course Code	9485
Course	Yr 10 Sports Science	Unit Value	1.0
Units:	Factors Affecting Performance Units 1, 3, 4, 6, 7		
	Health, Safety and Training Units 1, 5		

CONTENT SUMMARY

Students should develop knowledge and understanding of:

Unit 1: Factors affecting performance

1 Skill

- Definition of skill.
- Types of skill: basic and complex, fine and gross motor skills, open and closed continuum.
- Factors affecting variations in skill level: age and maturity, motivation, anxiety, arousal conditions, facilities, environment, teaching and coaching.
- Simple information processing model: what is meant by the terms input, decision making, output, feedback.
- Types of feedback: intrinsic, extrinsic, knowledge of performance, knowledge of results.
- The importance of feedback.
- How you learn a new skill; considerations – limited channel capacity, overload, only do a little, instructions should be simple, demonstration should be simple. When you first do movement it goes into short term memory. Practice – movement goes into long term memory.

3 Skeleton and joints

- The four major functions of the skeleton:
- Examples of major bones of the body to highlight these functions.
- Relevance to performance and participation in physical activity.
- Examples of different types of joints:
- Describe the components of each type of joint.
- Describe the range of movements which includes:
- Ligament, cartilage and synovial fluid problems.

4 Muscles and tendons

- How muscles and their composition, function and action, affect movement and performance: fast twitch for power and strength activities, slow twitch for endurance activities.
- How activities and exercise affect the composition and efficiency of muscles, focusing on:
 - deltoid, trapezius, pectorals, biceps, triceps, latissimus dorsi, abdominals, gluteals, quadriceps, hamstrings, gastrocnemius.
- How improved muscle functioning can improve performance and participation in physical activities.
- The role of antagonistic pairs, prime movers and synergists during a range of physical activities,
- using examples from the muscles listed above.
- The role and function of tendons during movement.

6 Fitness

- Simple definition of fitness.
- Components of fitness; measurement and explanation, with examples.
- Health related exercise programme.
- Tests of cardio-vascular fitness:
- Factors which affect fitness.
- Fitness, graphs/charts/data; understanding, dissemination of information.
- Maximum oxygen uptake (VO₂ max.) as a measurement of cardio-vascular fitness.
- Plan a health-promoting exercise programme; considerations, involve FITT (frequency, intensity, time, training activity).

7 Physique

- Understand the term physique.
- Three extreme body types.
- Examples of each body type, from different sports.
- Advantages of certain body types for certain sports

Unit 2: Health, safety and training

1 Health

- World Health Organisation (WHO) definition of health – a state of complete physical, mental and social well-being.
- Physical well-being:
- Mental well-being:
- Social well-being:
- Health and fitness

5 Exercise and training

- Exercise is an important component of a healthy lifestyle.
- Exercise has physical, mental and social benefits.
- Exercise works on all the body systems.
- Cells get energy from glucose in the process called respiration.
- Aerobic respiration uses oxygen to release energy:
- When aerobic exercise occurs
- Need aerobic exercise when one exercises over a lengthy period of time. Examples of type of exercise.
- Anaerobic respiration occurs without oxygen
- When anaerobic exercise occurs
- Anaerobic respiration is used for short periods of intense exercise.
- Examples of aerobic and anaerobic exercises.
- Training is a programme and a procedure used to improve performance.
- Effect of exercise on the heart, circulatory and respiratory systems.

ASSESSMENT

TASK	DUE DATE	WEIGHTING
Assignment – designing a weights program	Part A Week 5, Part B Week 12	25%
Term 1 Exam	Week 8	25%
Term 2 Exam	Week 17	25%
Practical Work	Ongoing	25%

Attendance and participation

Students are expected to submit all assessment items and attend all classes, participate in a positive manner and seek support whenever it is required. It is your responsibility to catch up on missed work when absent from class.

Late submission of work

Students are encouraged to submit work on time, as it is a valuable organisational skill. Students are encouraged to complete work even if it is late, as there are educational benefits in doing so. If you do not submit your work to your class teacher, make sure that it is signed and dated by either another member of staff in the faculty staffroom, or a member of the front office staff. No work will be accepted after marked work has been returned, or accepted after the unit has completed. Computer and/or printer failure will not be accepted as a valid reason for late work. Make sure you backup, keep hard copies and rough notes.

Cheating and dishonest practice

The integrity of the College's assessment system relies upon all involved acting in accordance with the highest standards of honesty and fairness. Any departure from such standards will be viewed very seriously. Accordingly:

- Plagiarism - claiming authorship of someone else's work (intentionally or otherwise) - is a serious misdemeanour, and attracts severe penalties.
- Students are required to acknowledge the source of all material that is incorporated into their own work.
- Students may not submit the same item for assessment in more than one unit, unless specific agreement has been reached with the class teacher.

RIGHT TO APPEAL

You can appeal against your assessment if you feel that the result you obtained is not fair. You should first talk to your class teacher, and if you are not satisfied with the explanation you must discuss the situation with the Executive Teacher of the faculty concerned. If you still do not feel that your result is fair you should talk to the Deputy Principal Programs for further advice on the 'appeal process'.

Executive Mark Armstrong

Class Tracey Marris

Unit Grade Descriptors for Sports Science year 10:

A student who achieves the grade A typically	A student who achieves the grade B typically	A student who achieves the grade C typically	A student who achieves the grade D typically	A student who achieves the grade E typically
<p>KNOWLEDGE, UNDERSTANDING AND APPLICATION</p> <ul style="list-style-type: none"> • Demonstrates a comprehensive understanding and application of concepts, terminology, rules and strategies <p>CRITICAL ANALYSIS</p> <ul style="list-style-type: none"> • Demonstrates critical analysis and reflects thoughtfully on experiences <p>EFFECTIVE COMMUNICATION</p> <ul style="list-style-type: none"> • Communicates effectively using a variety of modes demonstrating an excellent grasp of key concepts and terminology <p>PERFORMANCE SKILLS</p> <ul style="list-style-type: none"> • Demonstrates a broad range of highly developed motor skills on a continual basis during individual or team activities • Consistently responds to corrective feedback • Demonstrates excellent ability to plan and organise • Consistently works with initiative and independence to develop and practise relevant skills • Consistently participates enthusiastically in a wide range of activities • Demonstrates an excellent understanding of safety issues, procedures and uses equipment safely • Is an enthusiastic and productive member/leader in any team role 	<p>KNOWLEDGE, UNDERSTANDING AND APPLICATION</p> <ul style="list-style-type: none"> • Demonstrates a broad understanding and application of concepts, terminology, rules and strategies <p>CRITICAL ANALYSIS</p> <ul style="list-style-type: none"> • Thinks critically and reflects on experiences <p>EFFECTIVE COMMUNICATION</p> <ul style="list-style-type: none"> • Communicates effectively using a variety of modes demonstrating a good grasp of key concepts and terminology <p>PERFORMANCE SKILLS</p> <ul style="list-style-type: none"> • Demonstrates an excellent understanding of safety issues, procedures and uses equipment safely • Demonstrates a range of well-developed motor skills on a regular basis during individual and team activities • Regularly responds to corrective feedback • Demonstrates thorough ability to plan and organise • Regularly works with enthusiasm and independence to develop and practise relevant skills • Regularly participates enthusiastically in a wide range of activities • Demonstrates a good understanding of safety issues, procedures and uses equipment safely 	<p>KNOWLEDGE, UNDERSTANDING AND APPLICATION</p> <ul style="list-style-type: none"> • Demonstrates a sound understanding and application of concepts, terminology, rules and strategies <p>CRITICAL ANALYSIS</p> <ul style="list-style-type: none"> • Reflects on experiences <p>EFFECTIVE COMMUNICATION</p> <ul style="list-style-type: none"> • Communicates effectively demonstrating a sound grasp of key concepts and terminology <p>PERFORMANCE SKILLS</p> <ul style="list-style-type: none"> • Demonstrates a range of motor skills on a regular basis in controlled situations • On most occasions will respond to corrective feedback • Demonstrates sound ability to plan and organise • Works with supervision to develop and practise relevant skills • Participates in a range of activities • Demonstrates a sound understanding of safety issues and procedures and uses equipment safely • Contributes to and works with group members to complete set tasks 	<p>KNOWLEDGE, UNDERSTANDING AND APPLICATION</p> <ul style="list-style-type: none"> • Understands, applies and recognises basic concepts, terminology, rules and strategies with guidance <p>CRITICAL ANALYSIS</p> <ul style="list-style-type: none"> • Is developing reflection skills <p>EFFECTIVE COMMUNICATION</p> <ul style="list-style-type: none"> • Communicates basic concepts and terminology in concrete terms <p>PERFORMANCE SKILLS</p> <ul style="list-style-type: none"> • Demonstrates some motor skill development on an irregular basis • Occasionally responds to corrective feedback • With assistance demonstrates basic planning and organisational skills • Works under supervision to practise and develop skills • Participates with encouragement in activities • With direction understands safety procedures and generally uses equipment safely • With supervision undertakes set tasks in group situations 	<p>KNOWLEDGE, UNDERSTANDING AND APPLICATION</p> <ul style="list-style-type: none"> • Understands and recognises limited basic concepts, terminology, rules and strategies with assistance <p>CRITICAL ANALYSIS</p> <ul style="list-style-type: none"> • Rarely demonstrates reflection skills <p>EFFECTIVE COMMUNICATION</p> <ul style="list-style-type: none"> • Communicates simple concepts and terminology with assistance <p>PERFORMANCE SKILLS</p> <ul style="list-style-type: none"> • With assistance demonstrates limited motor skill development • Rarely responds to corrective feedback • With direct instruction demonstrates limited planning and organisational skills • Works under direct supervision to practise skills • Demonstrates limited participation in activities • Rarely demonstrates safety procedures and the correct use of equipment • Demonstrates limited interaction with others in group situations