

## UNIT OUTLINE

Year: 11 and 12 Accreditation: Accredited

Timetable Period: Semester 1 2020

Classroom Teachers: Tim Davies

Executive Teacher: Mark Armstrong

<b>Course Title</b>	Exercise Science A	<b>Course Code:</b>	9193
<b>Semester Unit</b>	Preparation for Training and Performance	<b>Unit Value/Code:</b>	1.0/93871
<b>Term Unit (a)</b>	Preparation for Training and Performance a	<b>Unit Value/Code:</b>	0.5/93872
<b>Term Unit (b)</b>	Preparation for Training and Performance b	<b>Unit Value/Code:</b>	0.5/93923

### Unit Description

In this unit students investigate the factors that influence sports performance. Students will critically analyse the effectiveness of training and nutritional guidelines and how they contribute to the improvement of athletic performance. Students will explore a variety of training and nutritional principles to develop an understanding of the varying needs of community target groups and elite athletes.

### Specific Unit Goals

This unit should enable students to:

<b>A Course</b>
<ul style="list-style-type: none"> <li>understand the significance of preparation for training and performance and identify physiological changes and outcomes</li> <li>explore techniques used in the preparation for training and performance and apply to participants in physical activity</li> </ul>

### Content Descriptions

All knowledge, understanding and skills below must be delivered:

<b>A Course</b>
<b>Concepts, theories and models</b>
<ul style="list-style-type: none"> <li>analyse concepts, theories and models related to preparation for training and performance, for example; components of fitness, digestive and energy systems and food as a fuel source (EXSA01)</li> </ul>

<b>A Course</b>
<ul style="list-style-type: none"> <li>analyse limitations and assumptions related to preparation for training and performance for example, fitness as a continuum, fitness testing and ergogenic aids (EXSA02)</li> <li>analyse data and procedures related to preparation for training and performance, for example, methods of training, nutritional data, food as an energy source, energy systems (EXSA03)</li> <li>apply concepts, theories and models implemented in training and performance for example, principles and methods of training and fuelling strategies (EXSA04)</li> </ul>
<b>Principles, strategies, methodology</b>
<ul style="list-style-type: none"> <li>analyse principles of preparation for training and performance, for examples; principles of training, energy balance and fuelling for exercise (EXSA05)</li> </ul>

- analyse strategic methodology in preparation for training and performance, for example, methods of training, glycaemic index and fuelling strategies (EXSA06)
- understand strategies and methods related to training and performance, for example; training and nutrition strategies (EXSA07)

### A Course

#### Nature and purpose

- evaluate the nature and purpose of preparation for training and performance, for example, components of fitness, energy systems and energy *sources* (EXSA08)
- understand the responses and adaptations of the human body to training and performance, for example; environmental factors of performance, nutritional response to exercise (EXSA09)
- understands the significance of preparation for training and performance (EXSA10)
- analyse issues, problems and practices in relation to preparation for training and performance, for example; principles of training, athlete nutrition and ergogenic aids (EXSA11)
- analyse protocols and procedures and their implications on preparation for training and performance, for example; methods of training, Australian guide to healthy eating (EXSA12)

### A Course

- evaluate whether sources of information are valid and reliable (EXSA13)
- understands the significance and sequence of preparation for training and performance, for example; principles and methods of training, adsorption and distribution of nutrients (EXSA14)
- interpret data of physiological outcomes in preparation for training and performance, for example, fitness protocols and food labelling (EXSA15)

#### Communication

- apply varying communication skills and methodologies within the context of structure and function of the human body (EXSA16)
- using measuring instruments to compare measurements, grouping, estimating, counting, statistical information, interpreting, and using graphs, tables and diagrams (EXSA17)
- communicates correct terminologies, language convention, forms and acknowledging sources (EXSA18)

#### A guide to reading and implementing content descriptions

In this course there are opportunities to use a range of practical and theoretical applications to promote understanding. Content descriptions specify the knowledge, understanding and skills that students are expected to learn and that teachers are expected to teach. Teachers are required to develop a program of learning that allows students to demonstrate all the content descriptions. The lens which the teacher uses to demonstrate the content descriptions may be determined by the teacher when developing their program of learning.

A program of learning is what a college provides to implement the course for a subject. It is at the discretion of the teacher to emphasis some content descriptions over others. The teacher may teach additional (not listed) content provided that it meets the specific unit goals. This will be informed by the student needs and interests.

**Assessment:**

TASK	DUE DATE	WEIGHTING
Participation and Practical Assignment	Ongoing throughout the semester	25%
Exam	Week 9	25%
Nutrition Assignment	Week 15	25%
Exam	Exam Week (TBC)	25%

**SPECIFIC ENTRY & EXIT REQUIREMENTS FOR TERM UNITS:**

This is a Semester Unit; students wishing to enter or exit after the end of term must have the change approved by the Academy Executive Leader and need to complete at least 50% of the assessment

**ASSESSMENT CRITERIA FOR ASSESSMENT AND REPORTING OF STUDENT ACHIEVEMENT****Attendance and Participation**

It is expected that students will attend and participate in all scheduled classes/contact time/structured learning activities for the units in which they are enrolled, unless there is due cause and adequate documentary evidence is provided. Any student whose attendance falls below 90% of the scheduled classes/contact time or 90% participation in structured learning activities in a unit, without having due cause with adequate documentary evidence will be deemed to have voided the unit. However, the principal has the right to exercise discretion in special circumstances if satisfactory documentation is supplied.

**Completion of Assessment Items**

Students are expected to substantially complete and submit all assessment items. Exemption from an item and/or alternative assessment without penalty is available to students providing adequate documentary evidence. In order to meet the minimum assessment requirements of a unit, a student must substantially complete and submit at least 70% of the total assessment. However, the principal has the right to exercise discretion in the award of a grade or score in special circumstances where satisfactory documentation is supplied.

**Late Submission of Assessment Items**

Students are encouraged to submit work on time as this is a valuable organisational skill. Students are also encouraged to complete work even if it is late as there are educational benefits in so doing. The following policy is to ensure equity for all students:

- All assessment tasks are expected to be submitted by the specified due date
- Where marks are awarded for assessment tasks, a late penalty will apply unless an extension is granted. The penalty for late submission is 5% of possible marks per calendar day late, including weekends and public holidays, until a notional zero is reached. If an item is more than 7 days late, it receives the notional zero. Submission on weekends or public holidays is not acceptable. Calculation of a notional zero is based on items submitted on time or with an approved extension (Refer to Notional Zeros)
- Where marks are not awarded, and a grade only is given for an assessment task, teachers will take into account the extent to which students have demonstrated their ability to complete and submit the task by the due date (taking into account any extensions granted) in awarding the grade
- Unless there are exceptional circumstances, students must apply for an extension to the specified due date in advance, providing due cause and adequate documentary evidence for late submission
- It may not be possible to grade or score work submitted late after marked work in a unit has been returned to other students
- The principal has the right to exercise discretion in the application of the late penalty in special circumstances where satisfactory documentation has been provided.

**Notional Zeros**

Where students fail to hand in assessment items for which marks are awarded, they will be awarded a notional zero for that assessment item. The notional zero will be a score, which lies between 0.1 of a standard deviation below the lowest genuine score for that item and zero. Note: if the lowest genuine score is zero, the notional zero is zero.

**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. Plagiarism is the copying, paraphrasing or summarising of work, in any form, without acknowledgement of sources, and presenting this as a student's own work. Examples of plagiarism could include, but are not limited to:

- submitting all or part of another person's work with/without that person's knowledge
- submitting all or part of a paper from a source text without proper acknowledgement
- copying part of another person's work from a source text, supplying proper documentation, but leaving out quotation marks
- submitting materials which paraphrase or summarise another person's work or ideas without appropriate documentation
- submitting a digital image, sound, design, photograph or animation, altered or unaltered, without proper acknowledgement of the source.

### **Right to Appeal**

The ACT system operates a hierarchy of reviews and appeals:

- Student seeks review from teacher regarding assessment task mark/grade, unit score, unit grade, course score
- Student seeks review from head of department, if required following review by teacher
- Student appeals to her/his college principal for a review of college assessment relating to assessment task grade/mark, unit grade, unit score, course score, penalty imposed for breach of discipline in relation to assessment
- Student, who has been through the college appeal process, may appeal to the Board against the college procedures by which the appeal decision was reached.

**Executive Teacher: Mark Armstrong**

**FURTHER INFORMATION ON RELEVANT BSSS POLICIES CAN BE FOUND HERE:**

[http://www.bsss.act.edu.au/\\_data/assets/pdf\\_file/0010/313777/P\\_and\\_P\\_Manual\\_2019\\_V5.pdf](http://www.bsss.act.edu.au/_data/assets/pdf_file/0010/313777/P_and_P_Manual_2019_V5.pdf)

## Achievement Standards for Exercise Science A Course Year 12

	<i>A student who achieves an A grade typically</i>	<i>A student who achieves a B grade typically</i>	<i>A student who achieves a C grade typically</i>	<i>A student who achieves a D grade typically</i>	<i>A student who achieves an E grade typically</i>
<b>Knowledge and understanding</b>	<ul style="list-style-type: none"> <li>analyses exercise science theories, concepts and models and explains their limitations and assumptions</li> <li>analyses exercise science principles, strategies, methodology, approaches to data, procedures and explains their validity and reliability</li> <li>analyses exercise science topics and explains their significance</li> <li>communicates ideas with coherent arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>explains exercise science theories, concepts and models and discusses their limitations and assumptions</li> <li>explains exercise science principles, strategies, methodology, approaches to data, procedures and discusses their validity and reliability</li> <li>explains exercise science topics and discusses their significance</li> <li>communicates ideas and arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>discusses exercise science theories, concepts and models and describes their limitations and assumptions</li> <li>discusses exercise science principles, strategies, methodology, approaches to data, procedures and describes their validity and reliability</li> <li>discusses exercise science topics and describes their significance</li> <li>communicates ideas and arguments with referencing</li> </ul>	<ul style="list-style-type: none"> <li>describes exercise science theories, concepts and models with some reference to their limitations and assumptions</li> <li>describes exercise science principles, strategies, methodology, approaches to data, procedures with some reference to their validity and reliability</li> <li>describes exercise science topics and makes some reference to their significance</li> <li>communicates ideas and information with minimal referencing</li> </ul>	<ul style="list-style-type: none"> <li>identifies exercise science theories, concepts and models with little to no reference to their limitations and assumptions</li> <li>identifies exercise science principles, strategies, methodology, approaches to data, procedures with little or no reference to their validity and reliability</li> <li>identifies exercise science topics and makes little or no reference to their significance</li> <li>communicates limited ideas and information with limited or no referencing</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>applies concepts, models, principles, methodology, ideas with control and precision to a practical context and specific physical, health or outdoor education activities</li> <li>plans and undertakes independent inquiries and analyses relevant data and information based on critical evaluation of valid and reliable sources</li> <li>makes discerning and effective choice of principles, strategies, methodology, procedures to solve a wide range of complex problems and to enhance meaning and the physical performances of self and others</li> <li>analyses practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>applies concepts, models, principles, methodology, ideas with control to a practical context and specific physical, health or outdoor education activities</li> <li>plans and undertakes independent inquiries and explains relevant data and information based on an assessment of valid and reliable sources</li> <li>makes effective and justified choice of principles, strategies, methodology, procedures to solve a range of problems and to enhance meaning and the physical performances of self and others</li> <li>explains practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>applies concepts, models, principles, methodology, ideas with some control to a practical context and specific physical, health or outdoor education activities</li> <li>undertakes guided inquiries and describes data and information based on appropriate sources</li> <li>makes effective choice of strategies, methodology, procedures to solve problems and to enhance physical performances of self and others</li> <li>describes practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>applies concepts, models, principles, methodology, ideas with minimal control to a practical context and specific physical, health or outdoor education activities</li> <li>undertakes guided inquiries with some reference to data using limited sources</li> <li>makes some effective choice of strategies, methodology, procedures to solve problems with some impact on physical performances of self and others</li> <li>identifies practical techniques and performance with some reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>applies concepts, models, principles, methodology, ideas with little or no control in a practical context</li> <li>undertakes guided research with little or no reference to data and sources</li> <li>selects strategies, methodology, procedures to solve problems with little or no impact on physical performances of self and others</li> <li>identifies practical techniques and performance with little or no reference to specific skills criteria</li> </ul>

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<b>Knowledge and Understanding</b>	<ul style="list-style-type: none"> <li>critically analyses exercise science theories, concepts and models and evaluates their limitations and assumptions</li> <li>critically analyses exercise science principles, strategies, methodology, approaches to data, procedures and evaluates their validity and reliability</li> <li>critically analyses the nature and purpose of exercise science and evaluates the impact of strategies and techniques on individuals' performance, health and well-being in varied and changing contexts</li> <li>critically analyses representations and interpretations of exercise science topics and evaluates their significance</li> <li>communicates ideas with coherent arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>analyses exercise science theories, concepts and models and explains their limitations and assumptions</li> <li>analyses exercise science principles, strategies, methodology, approaches to data, procedures and explains their validity and reliability</li> <li>analyses the nature and purpose of exercise science and explains the impact of factors on individuals' performance, health and well-being in changing contexts</li> <li>analyses representations and interpretations of exercise science topics and explains their significance</li> <li>communicates ideas and arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>explains exercise science theories, concepts and models and describes their limitations and assumptions</li> <li>explains exercise science principles, strategies, methodology, approaches to data, procedures and describes their validity and reliability</li> <li>explains the nature and purpose of exercise science theories and describes the impact of factors on individuals' performance, health and well-being in familiar contexts</li> <li>explains representations and interpretations of exercise science topics and describes their significance</li> <li>communicates ideas and arguments with referencing</li> </ul>	<ul style="list-style-type: none"> <li>describes exercise science theories, concepts and models with some reference to their limitations and assumptions</li> <li>describes exercise science principles, strategies, methodology, approaches to data, procedures with some reference to their validity and reliability</li> <li>describes the nature and purpose of exercise science theories and identifies the impact of factors on individuals' performance, health and well-being in familiar contexts</li> <li>describes representations and interpretations of exercise science topics and makes some reference to their significance</li> <li>communicates ideas and information with minimal referencing</li> </ul>	<ul style="list-style-type: none"> <li>identifies exercise science theories, concepts and models with little or no reference to their limitations and assumptions</li> <li>identifies exercise science principles, strategies, methodology, approaches to data, procedures with little or no reference to their validity and reliability</li> <li>identifies the nature and purpose of exercise science theories with little or no reference to the impact of factors on individuals' performance, health and well-being</li> <li>identifies representations and interpretations of exercise science topics and makes little or no reference to their significance</li> <li>communicates limited ideas and information with limited or no referencing</li> </ul>
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