**Sample Course Outline**

Physical Education Studies

ATAR Year 12

**Copyright**

© School Curriculum and Standards Authority, 2019

This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority’s moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the [Creative Commons Attribution 4.0 International licence](http://creativecommons.org/licenses/by/4.0/).

**Disclaimer**

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

Sample course outline

Physical Education Studies – ATAR Year 12

Unit 3 and Unit 4

| **Week** | **Syllabus content** | **Assessment** |
| --- | --- | --- |
| 1 | **Developing physical skills and tactics**   * develop and refine sport specific skills and techniques to enhance performance * select and adapt skills and techniques in a variety of competitive situations * select and apply advanced tactical responses varying in complexity   + various environmental conditions   + strengths and weaknesses of opposition   + responding to opposition   + phases/stages of play * select and adapt tactics in a variety of competitive situations   Note: the above content areas are ongoing and will be addressed throughout the practical skill development teaching and learning activities.  **Functional anatomy**   * structure of skeletal muscle   + epimysium   + fascicle   + perimysium   + muscle fibre   + myofibril * the role of myosin, actin and the sarcomere in sliding filament theory |  |
| 2 | **Functional anatomy**   * structure of skeletal muscle   + epimysium   + fascicle   + perimysium   + muscle fibre   + myofibril * the role of myosin, actin and the sarcomere in sliding filament theory * relationship between the velocity and duration of muscle contraction to the amount of force exerted by the contraction   + force–velocity   + force–length * function of the nerves, spinal cord, motor unit (dendrite, axon, neuron) |  |
| 3 | **Functional anatomy**   * relationship between muscle contraction and nerve function * characteristics of fast and slow twitch fibres and their relationship to physical performance types  (sprint, endurance)   + Type I   + Type IIa   + Type IIb |  |
| 4 | **Biomechanics**   * definition of momentum and how it applies to a selected sport   + conservation of momentum (Newton’s Second Law of Motion)   + impulse–momentum relationship   + coefficient of restitution * definition and application of the following concepts in a set sport   + moment of inertia   + angular momentum   + levers   + three classes of levers |  |
| 5 | **Biomechanics**   * relationship between torque and the use of levers in sport: torque = force x perpendicular distance of lever arm * application of biomechanical principles to analyse physical skills   + balance   + coordination continuum   + force-motion   + force-time   + inertia   + optimal projection   + range of motion   + segmental interaction   + spin |  |
| 6–7 | **Biomechanics**   * definitions of fluid, laminar and turbulent flow * definitions of pressure drag (form drag), surface drag (skin friction) and wave drag and how they apply to sporting contexts * Bernoulli’s principle - effect of shape and pressure differential |  |
| 8–9 | **Biomechanics**   * Bernoulli’s principle - effect of shape and pressure differential * changes in flight paths in spinning balls–the Magnus effect in relation to   + top spin   + back spin   + side spin   + no spin | **Task 1:** topic test – functional anatomy and biomechanics  (10.5%) |
| 10–12 | **Exercise physiology**   * relationship between energy demands and nutritional requirements during physical activity   + phases of activity – pre-competition, during exercise, recovery   + nutritional considerations – balanced diet, glycemic index, fats, proteins, carbohydrates, fluid replacement | **Task 2**: soccer skill performance – developing skills and tactics  (5.25%) |
| 13–14 | **Exercise physiology**   * physiological changes brought on by the use of performance enhancers   + protein powders   + anabolic steroids   + stimulants | **Task 3:** soccer game performance – developing skills and tactics  (5.25%) |
| 15 | **Exercise physiology**   * implications of preparing and performing in varying environmental conditions   + heat/humidity   + altitude   + cold | **Task 4:** laboratory activity – exercise physiology and biomechanics  (7%) |
| 16–17 | **Exercise physiology**   * training programs designed to improve performance in relation to:   + [periodisation](http://www.trainingsmartonline.com/swimming_and_triathlon_periodisation.php): micro cycle, macro cycle, pre-season, in-season, off-season   + specific energy system requirements   + [peaking](http://www.eis2win.co.uk/gen/news_peaking.aspx)   + [overtraining](http://physiotherapy.curtin.edu.au/resources/educational-resources/exphys/00/overtraining.cfm)   + injured athletes   + [tapering](http://www.nswis.com.au/ArticleDocuments/234/Tapering.pdf)   + recovery   + maintenance | **Task 5:** topic test – exercise physiology  (7%) |
| 18 | Revision and catch up  **Task 6: Semester 1 Written examination**  **Task 7: Semester 1 Practical examination** | **Task 6:** Semester 1 written examination  (14 %)  **Task 7:** Semester 1 practical examination – developing skills and tactics  (4.5%) |
| 19 | **Motor learning and coaching**   * definition of transfer of learning * categories of transfer of learning   + skill to skill   + theory to practise   + training to competition |  |
| 20 | **Motor learning and coaching**   * effects of transfer of learning   + positive   + negative   + zero effects * impact of positive, negative and zero effects of transfer of learning on skill execution and movement efficiency |  |
| 21 | **Motor learning and coaching**   * analyse movement skills of self and others to identify errors, provide feedback and suggest corrections to improve performance |  |
| 22 | **Motor learning and coaching**   * design coaching/training activities to improve performance in selected skills, including shaping, chaining, static-dynamic, simple-complex * use of different leadership styles – democratic, authoritarian and laissez-faire to suit audience needs |  |
| 23 | **Motor learning and coaching**   * use checklists and video to analyse and reflect on the performance of self and others in physical activity |  |
| 24 | **Motor learning and coaching**   * learning and skill development in relation to correction and improvement of self and others   + use of video analysis   + reflective journals   + peer/mentor/coach feedback   + questionnaires | **Task 8:** volleyball skill performance – developing skills and tactics  (5.25%) |
| 25 | **Sports psychology**   * mental skills strategies used pre-, during and post-performance to manage stress, motivation, concentration, self-confidence and arousal levels   + self-talk   + relaxation   + performance routines   + goal-setting   + imagery | **Task 9:** volleyball game performance – developing skills and tactics  (5.25%) |
| 26–27 | **Sports psychology**   * Carron’s model of group cohesion   + the relationship between social loafing and group cohesion   + the influence of social loafing on individual and group performance   + strategies to improve group cohesion   + factors affecting group cohesion * environmental * leadership * personal * team | **Task 10:** *Remember the Titans* – sport psychology  (7%) |
| 28 | Revision |  |
| 29 | **Task 11: Semester 2 Written examination**  **Task 12: Semester 2 Practical examination** | **Task 11:** Semester 2 written examination  (24.5 %)  **Task 12:** Semester 2 practical examination – developing skills and tactics  (4.5%) |