VCE Physical Education – Units 3 and 4: 2018–2024

Sample teaching schedule

Units 3 and 4

Unit 3 Movement skills and energy for physical activity

| Week | Area | Topics | Practical activities |
| --- | --- | --- | --- |
| 1 | How are movement skills improved? | Classification of skills – fundamental motor skills, sport specific skills, open and closed, gross and fine, discrete, serial and continuous | Participate in participate in a range of fundamental movement skills (FMS): running, jumping, leaping, dodging, catching, throwing, kicking, bouncing and striking  Participate in a game of basketball or netball. Identify the movement skills required to play and classify each of the skills as discrete, serial or continuous. |
| 2 | Influences on movement and motor skill development  Principles of qualitative movement analysis | As a coach develop and implement strategies to overcome the differences in growth, development and maturation of your junior sports team  Record a classmate performing a simple skill. Consider the best angle and distance for recording. Review the footage to evaluate the performance and provide feedback for error correction |
| 3 | Angular and liner kinetic concepts of human movement | Perform three types of sprint starts: bullet or bunch start, medium start or elongated start to determine the biomechanical effectiveness of each type of start\* |
| 4 | Angular and linear kinematics concepts of human movement | Participate in and digitally record, various athletics events (shot put, discus, high jump, long jump). Use the video footage to perform a qualitative analysis of the release height, angle and speed for each of the projectiles\* |
| 5 | Equilibrium and human movement | Laboratory task – levers in sport. Participate in a game of baseball or softball\* |
| 6 | Direct and constrains based coaching | Participate in a modified (small-sided) version of AFL, soccer or hockey. Identify the task constraints that have been modified and provide a justification for the use of constraints based coaching for junior athletes. |
| 7 | Influences on movement skill development from a sociocultural perspective; consider family and peers and cultural norms and traditions.  Stages of learning | Conduct an audit of the sports offered at your school for males and females and participate in two of these sports.  Coach a junior sports team. Determine the stages of learning of the members of the team and through correct application of both biomechanical and skill acquisition principles, develop the movement skills of the students in the team |
| 8 | Practice strategies and feedback | Design, conduct and report on an investigation in to the type of feedback or the type of practice provided to junior athletes in the team being coached |
| 9 | How does the body produce energy? | SAC task – structured questions\* |  |
| 10 | Fuels for energy production  ATP – CP system | Snack analysis – determine the food fuels contained in a number of different snack foods that students may consume before, during or after participation in physical activity  Participate in a number of short duration, high intensity activities that demonstrate the utilisation of the ATP-CP system |
| 11 | Anaerobic glycolysis system | Perform a phosphate recovery test to investigate the fatigue/limiting factors of the anaerobic energy systems |
| 12 | Aerobic energy system | Participate in a team sport to determine the role of the aerobic energy system |
| 13 | Interplay of the energy systems | Participate in a team sport and at the conclusion, record information regarding the duration of the activity, the intensity of the activity (record heart rates), the rest periods and the types of movement skills performed\* |
| 14 | SAC task – data analysis\* |  |
| 15 | Oxygen uptake at rest and during exercise | Collect heart rate data while participating in a continuous activity such as running, swimming or cycling, for a minimum of 20 minutes |
| 16 | Acute responses to exercise  SAC task- laboratory report\* | Collect data\* on acute responses to exercise: record resting heart rate, respiratory rate, blood pressure (if available) and temperature after lying down for 5 minutes. Perform 1 minute of continuous star jumps and repeat each of the measurements and an observation of any muscular changes. Rest for five minutes and then perform a wall sit (squat) for 1-minute |

\*the asterisked practical activities are identified as possible data collection tasks for use in a SAC

Unit 4 Training to improve performance

| **Week** | **Area** | **Topics** | **Practical activities** |
| --- | --- | --- | --- |
| 1 | What are the foundations of an effective training program? | Activity analysis | Record class participation in a team sport for activity analysis\* |
| 2 | Fitness components | Activity analysis\*  Design and implement a fitness assessment protocol that ensures that the testing procedure is ethically sound, valid and reliable |
| 3 | SAC task – written report\* | Participate in a variety of physical activities that utilise each of fitness components |
| 4 | Assessment of fitness | Perform a battery of fitness tests |
| 5 | How is training implemented effectively to improve fitness? | Recording of training data  Components of a training session (warm up, conditioning phase and cool down) | Visit a research facility to experience the use of high technology, laboratory based fitness testing equipment to analyse fitness. Compare the protocols, techniques and outcomes of the laboratory based testing to field tests conducted at school  Design and lead the class in an appropriate warm up for a selected sport or activity. |
| 6 | Training principles – frequency, intensity, time and type, progressions, specificity, individuality, diminishing returns, variety, maintenance, overtraining and detraining | Record participation in physical activity for a week using a personal activity tracking devices (wearable technologies, smart phone apps, computer based software).  Participate in a continuous training session\* |
| 7 | Training methods | Participate in a fartlek training session\*  Participate in a plyometric training session\* |
| 8 | Training methods | Participate in a variety of interval training sessions (including short, medium, long and high intensity interval training)\* |
| 9 | Training methods | Participate in a resistance training session\*  Participate in a flexibility training session\* |
| 10 | Training methods | Participate in a circuit training session\* |
| 11 | SAC task – reflective folio\*  SAC task- written report |  |
| 12 | Psychological strategies to enhance performance  Nutritional and rehydration strategies | Participate in a psychological strategies (mental imagery, arousal motivation etc.) laboratory |
| 13 | Chronic adaptations | Participate in a high intensity, small sided (2 v 2 or 3 v 3) soccer game. Each team rehydrates using a different source (water, Powerade®, Lucozade® etc.) |
| 14 | SAC task – structured questions |  |
| 15 | All | Unit 3 - 4 revision |  |
| 16 | Unit 3 - 4 revision |  |
| 17 | Exam preparation |  |
| 18 | Exam preparation |  |

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