

L1/2 Cambridge Nationals Certificate in Sport Science

For students in Year 10 from July 2018, the course offered by the PE Faculty is L1/2 Cambridge National Certificate in Sport Science, which involves five hours over two weeks of theory and practical teaching.

Over the two years students are taught the content required to complete their coursework assignments and pass an external exam which is sat around January time of Year 10 and can be taken again in Year 11 (2nd chance).

The final grade for the qualification is based on a structure of Distinction* at Level 2 (*2), Distinction at Level 2 (D2), Merit at Level 2 (M2), Pass at Level 2 (P2), Distinction at Level 1 (D1), Merit at Level 1 (M1), Pass at Level 1 (P1) or Not Yet Achieved.

The Cambridge Nationals in Sport Science offer students the opportunity to study key areas of sport science including anatomy and physiology linked to fitness, health, injury and performance, the science of training and application of training principles, and sports nutrition. See below some information about the units we have selected to teach.

Units Assessment Method	Units Assessment Method	%
R041: Reducing the risk of sports injuries	Written paper 1 hour – 60 marks.	25
R042: Applying principles of training	Centre assessed task, OCR moderated.	25
R043: The body's response to physical activity	Centre assessed task, OCR moderated.	25
R045: Sports nutrition	Centre assessed task, OCR moderated.	25

Unit R041: Reducing the risk of sports injuries (exam)

By completing this unit, learners will know how to prepare participants to take part in physical activity in a way which minimises the risk of injuries occurring, how to react to common injuries that can occur during sport and how to recognise the symptoms of some common medical conditions, providing a good foundation to undertake formal first aid training and qualifications.

- Students can receive grades from L1 pass to Level 2 distinction* and will have the opportunity to re-sit the exam if required.

Learning Outcome 1: Understand different factors which influence the risk of injury
Extrinsic factors which can influence the risk of injury, i.e. type of activity (e.g. contact sports present different injury risks from gymnastic activities), coaching/supervision, environmental factors, equipment, safety hazards, i.e. Intrinsic factors which can influence the risk of injury, physical preparation, individual variables, psychological factors, posture and causes of poor posture and sports injuries related to poor posture.
Learning Outcome 2: Understand how appropriate warm up and cool down routines can help to prevent injury.
The physical benefits of a warm up, the psychological benefits of a warm up, key components of a warm up, physical benefits of a cool down, key components of a cool down, specific needs which a warm up and cool down must consider.
Learning Outcome 3: Know how to respond to injuries within a sporting context
Acute and chronic injuries, types, causes and treatment of common sports injuries, how to respond to injuries and medical conditions in a sporting context, Emergency Action Plans (EAP) in a sporting context
Learning Outcome 4: Know how to respond to common medical conditions
The symptoms of common medical conditions and how to respond to them.

Coursework elements: Students have to complete the exam board assigned scenarios. They will be allowed 2 hand in opportunities which must then be marked, improved and then re-submitted.

Unit R042: Applying principles of training

By completing this unit, learners will develop knowledge and understanding of the principles and methods of training and the application of these in the design of training programmes along with practical skills in fitness testing.

Learning Outcome 1: Know the principles of training in a sporting context
The principles of training in a sporting context: Progression, specificity, reversibility, moderation and variance.
Learning Outcome 2: Know how training methods target different fitness components
Aerobic and anaerobic exercise, components of fitness and methods of training.
Learning Outcome 3: Be able to conduct fitness tests
Fitness testing and how to interpret the results of fitness tests.
Learning Outcome 4: Be design a fitness training programme
Develop a fitness training programme and evaluate the effectiveness of the training programme.

Unit R043: The body's response to physical activity

By completing this unit, learners will understand key aspects of the structure and function of the musculo-skeletal and cardio-respiratory systems and investigate some of the changes which occur to them in response to short and long-term physical activity.

Learning Outcome 1: Know the key components of the musculo-skeletal and cardio-respiratory systems, their functions and roles
Key components of the musculo-skeletal system and its function, key components of cardio-respiratory system and its function, the role of the musculo-skeletal system in producing movement and the role of the cardio-respiratory system during physical activity.
Learning Outcome 2: Understand the importance of the musculo-skeletal and cardio-respiratory systems in health and fitness
The benefits of cardio-respiratory fitness, muscular strength, flexibility and muscular endurance in everyday life.
Learning Outcome 3: Be able to assess the short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems
Different short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems, reasons for these and ways to measure and record the short-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems.
Learning Outcome 4: Be able to assess the long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems
Long-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems, reasons for these and ways to measure and record the long-term effects of physical activity on the musculo-skeletal and cardiorespiratory systems

Unit R045: Sports nutrition

By completing this unit, learners will consider the composition of a healthy, balanced diet. They will also consider the necessity of certain nutrients in particular quantities and the effects of a poor diet. They will reflect upon the role that diet plays in different sports and activities, and use the knowledge gained to produce an appropriate, effective diet plan for a performer.

Learning Outcome 1: Know about the nutrients needed for a healthy, balanced diet
Characteristics of a balanced diet, what nutrients are, the role of nutrients in a healthy, balanced diet and food sources of nutrients.
Learning Outcome 2: Understand the importance of nutrition in sport
The importance of nutrition before, during and after exercise, the reasons for the varying dietary requirements of different activity types and the use of dietary supplements.
Learning Outcome 3: Know about the effects of a poor diet on sports performance and participation
The definition of malnutrition, the effects of overeating on sports performance and participation, the effects of under eating on sports performance and participation and the effects of dehydration on sports performance and participation.
Learning Outcome 4: Be able to develop diet plans for performers
How to design a diet plan and how to evaluate the effectiveness of the diet plan.

For information about the units in detail, see the full version of the specification by OCR.

<http://ocr.org.uk/qualifications/cambridge-nationals/cambridge-nationals-sport-studies-level-1-2-j803-j813/>

Equally, if you have any further queries please do not hesitate to contact a member of the PE faculty.