# **CORE MODULES:** BSc (Hons) Sports Coaching & Physical Education

You must take modules worth 120 credits at each level of the course. Each module is worth a specified number of credits.

# Year one for full-time students (Level 4)

#### Introduction to Human Movement (15 credits)

• This module introduces you to the fundamentals of human movement. The module provides a sound grounding in the fundamentals of human movement and provides the essentials for further study in Biomechanics. The module will introduce you to the concept of qualitative movement diagnosis (QMD) and you will also study the types of motion a body can have, including the concepts of distance, speed and time and displacement, velocity and acceleration. These kinematic motion quantities will be explored practically and graphically. The importance of Newton's laws and the net external force to all movement will be explained, giving you an insight into how limb rotation can produce translational movement. In this module you will study and explore the content within the context of real sporting actions such as: standing, walking, running, jumping and throwing and by using the techniques of video analysis, experimental investigation and computer aided data analysis.

#### Sport and Exercise Psychology (15 credits)

• The primary focus of this module is to introduce you to key topics within Sport, Exercise and Performance Psychology and aims to give you an understanding of the psychological factors which may enhance, or inhibit sports performance and exercise participation. Such factors could include pre-competition nerves, attention control, self-confidence and motivation. You will be encouraged to reflect upon your own experiences in relation to these psychological factors and to consider the varying psychological demands of different sports and levels of participation.

#### Pedagogical Principles in Sport (15 credits)

• This module will introduce the key theoretical and practical concepts that underpin contemporary coaching theory and practice. By the end of the module you will have developed an appreciation of the coaching process in terms of the pedagogical, managerial, behavioural and ethical components which enable good practice.

#### Applied Pedagogical Principles in Sport (15 credits)

• The module explores the idea of enhancing athletes' learning through adopting different approaches and relationships as a coach. These concepts will be taught using an integrated approach, examining how all of the components link together to achieve success in coaching. The module will help develop key transferable and employable skills in communication, organisation and analysis of coaching practice, which will be assessed by a variety of coursework methods including a portfolio of reflections on practice and computer based assessments.

#### Organisation and Structure of Sport (15 credits)

• All sport practitioners, at whatever level, operate within and around sport organisations, systems, and structures. This broader socio-political organisational environment enables and constrains how sports practitioners operate. Consequently it is important to appreciate this broader environment in order to understand your role within it and how to navigate it in the most efficient and effective manner. During the module, students will develop an understanding of how sport organised and structured in the UK (and abroad), the dynamic and complex nature of the sport industry, and the role and influence of organisations and various governmental agencies (e.g., Sport England and UK Sport) in overseeing and delivering sport and physical activity.

## Research Methods for Sport and Exercise (15 credits)

• This module will provide an introduction to the core skills required for research in the area of sport science & sports coaching set in the context of a higher education environment. The module will act as key foundation within the degree programme providing wider skills for study and research. The module will seek to develop the skills and attributes required to initiate an understanding of the research process and stages associated with it and also an appreciation of different types of research.

# Anatomy and Physiology (15 credits)

• The module introduces the fundamental aspects of human anatomy and physiology in order to understand how the body responds and performs to physical activity. The regulation of the human body to stress (exercise) relates to an intricate set of homeostatic events, enabling different systems to increase their overall physiological output to sustain effort. The structure and function of the main organ systems in the body; the musculoskeletal, respiratory, cardiovascular and digestive systems will be examined and reviewed in relation to rest and in response to exercise.

#### Exercise Physiology and Nutrition (15 credits)

• Students will examine the different energy production pathways under aerobic and anaerobic conditions – and extend this understanding to identify the continuum of energy supply and demand during differing modes of exercise. Additionally, the role and contribution of the various macro-nutrients as fuel for the metabolism will be discussed. Then, energy expenditure during rest and physical activity will be investigated. To this end, students will examine how oxygen consumption can give us a reliable insight into our energy expenditure and the different fuel and energy systems used. In this module you will study and explore the content through lectures, seminars and laboratory based practical's where the physiological and metabolic principles will be applied and examined under both resting and exercise conditions.

# Year two for full-time students (Level 5)

## Psychological Profiling (15 credits)

• This module will extend the knowledge you have gained in the module Sport & Exercise Psychology and will specifically focus on psychological profiling and assessment methods. As such, you will learn the principles of assessing an athlete from a psychological perspective and consider how the findings from such assessments relate to psychological theories and performance issues in the applied setting. A second aim of the module is to examine how we can use these psychological assessment methods from a research perspective.

#### Perceptual Motor Skills (15 credits)

• Athletes rely on a constant stream of sensory information (e.g. visual, auditory, proprioceptive) from the environment to execute the motor skills needed for successful sporting performance. This module will focus on the three stages in motor control: Perception; Decision; Action. The perception of sensory information will be discussed in relation to goal directed and stimulus driven behaviour from a theoretical and applied perspective.

## Sports Development (15 credits)

• This module introduces students to the principles, processes and practices of sport development. Sport development is an equivocally contested, dynamic, and constantly evolving process of creating and enabling sporting opportunity and developmental pathways in order to increase participation levels and/or achieve international sporting success. The sport development process is explored in an applied manner and through political and management theoretical lens. It also builds on the organisation and structure of sport module in the first year by examining further the influence of government policies and the socio-political nature of the movement industry.

## Applied Teaching and Coaching (15 credits)

• This module aims to bridge the gap between academic theory and practice. The students will practically plan, deliver and evaluate real life coaching sessions with the help of a mentor. By the end of the module the student will have direct coaching/teaching experience and will have generated a portfolio of practical hours of coaching/teaching. The module will develop an appreciation of mentoring, coaching/teaching and reflection, whilst also developing valuable employability skills such as working in a team, communication and professionalism.

## Performance Analysis (15 credits)

• This module will focus on the underlying principles of being a performance analysts including hand notation, creating key performance indicators, reliability and validity of data and the use of software. Whilst predominantly theoretical in nature students will be expected to code matches/games/contests from their sport using sportscode pro software. This module will require some of the core skills of employability including data management, planning, and time management. The module will be assessed through the applied coding that the students undertake in their sport.

# Strength and Conditioning (15 credits)

• The module will provide within an in-depth exploration of safe and effective S&C practice. You will develop an evidence based applied rationale for the role of S&C work in relation different performance athletes. You will be introduced to the fundamental techniques and principles of athlete assessment, evaluation and consultation.

## Applied Research Skills (15 credits)

• The primary purpose of this module is to develop the knowledge-base and applied skills required to produce a substantive independent report supported by research and data interpretation. This module will provide opportunities to apply knowledge and key employability skills related to research design and presentation in a safe environment, and allow students to evaluate which research designs would be suit their final year independent module.

# Applied Research and Employability (15 credits)

• This module follows on from applied experiences gained from the Level 5 Applied Research Skills with the primary purpose of this module to develop the key competencies that support independent learning and exploration. Within the defined guidelines of create a research project proposal or a proposal for suitable work experience, this module will enable students to act with increasing autonomy through the reduced need for supervision and direction. Finally the module will evaluate the ethical and legal issues related to being an applied research or practitioner with Sport and Exercise Sciences.

# Final year for full-time students (Level 6)

# Undergraduate Project or Applied Practitioner (30 credits)

- Undergraduate Project The module provides the student with the opportunity to select an area within Sport and Exercise Sciences, determine and apply ethical standards, undertake an in-depth review of the literature, develop a series of testable hypotheses and research questions derived from the review and design and conduct a study in order to address these. Upon completion of the data collection the student will analyse, evaluate and discuss their findings in the context of the literature using critical reflection whilst presenting the project in an appropriately scientific format.
- Applied Practitioner This Sport and Exercise Sciences Advanced Work Experience module provides the student with the opportunity to develop, conceptualise, execute, analyse and reflect upon their own learning experiences linked to a vocationally relevant graduate aligned placement. It provides the student with the opportunity to focus their career aspirations in the final year of undergraduate study allowing them to immerse themselves, learning within a workplace and critically reflecting on the experience.

## Strategic Sports Development (15 credits)

• This outward facing, employability driven, and industry focused module introduces and applies the key principles and processes of strategic management. In building on previous sport development modules, students will explore contemporary strategic management related issues surrounding the management of public, private and voluntary sports organisations; appreciate the importance of the strategic planning process for the development of sporting opportunities; and understand sport practitioners can develop and contribute shared organisational objectives in order to achieve wider social outcomes.

## Ethical Coaching and Mentoring (15 credits)

• The module has three focused areas which include learning to mentor, appraising theoretical concepts with peers and finally the appreciation of the interdisciplinary nature of sports coaching and exercise science. The module permits the students the opportunity to work as a mentor to a coach (and/or level 5 student) applying the knowledge they have gained to a practical setting.

## Long Term Athlete Development (15 credits)

• The aim of this module is to investigate the underlying principles of the LTAD model, in doing so students will consider paediatric physiology, the development of sport in relation to LTAD and the implementation of LTAD across sports. Students who take this module will need to consider the physiological, emotional, cognitive and psychological development of children and adolescents. The majority of work will be lecture based but students will be expected to participate in some practical activities related to the fundamentals of movement.

## Developing Performance Athletes (15 credits)

• This module will consider working in this type of environment and the pressures that coaches and performance directors face when making systems/structures that balance the needs of the funding agencies against the needs of the athletes. The module will consider developing and managing the daily training environment, assessing athletes, Talent Identification/Detection and designing training programmes from an athlete centred, coach led perspective.

#### Applied Sports Psychology (15 credits)

• This module will specifically examine the psychological factors of successful performance and will address issues such as coach-athlete relationships, sport and exercise psychology interventions, coaching behaviour and burnout. The aim of the module is to provide the knowledge and skills to successfully prescribe and/or deliver sport and exercise psychology interventions as a coach or sport scientist.

#### Contemporary Issues in Sport, Exercise and Performance Psychology (15 credits)

• The module provides students with the most up-to-date topics discussed in national (e.g. BASES) and international (e.g. AASP, ISSP, FEPSAC) sport and exercise psychology conferences. Furthermore, the transfer and adaption of current and innovative research and technology from the general psychology domain is presented and discussed. This module helps develop a number of transferable skills relevant to general employment including problem solving, creativity, teamwork and thinking "outside of the box".