

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 1 (FHEQ LEVEL 4)

SPORT AND EXERCISE SCIENCE
DEGREE PROGRAMMES

SUBJECT SPECIFIC
PART TWO OF TWO
MODULE AND COURSE STRUCTURE
2022-23

DISCLAIMER

The Faculty of Science and Engineering has made all reasonable efforts to ensure that the information contained within this publication is accurate and up-to-date when published but can accept no responsibility for any errors or omissions.

The Faculty of Science and Engineering reserves the right to revise, alter or discontinue degree programmes or modules and to amend regulations and procedures at any time, but every effort will be made to notify interested parties.

It should be noted that not every module listed in this handbook may be available every year, and changes may be made to the details of the modules. You are advised to contact the Faculty of Science and Engineering directly if you require further information.

The 22-23 academic year begins on 26 September 2022

Full term dates can be found here

DATES OF 22-23 TERMS

26 September 2022 – 16 December 2022

9 January 2023 – 31 March 2023

24 April 2023 – 09 June 2023

SEMESTER 1

26 September 2022 – 27 January 2023

SEMESTER 2

30 January 2023 - 09 June 2023

SUMMER

12 June 2023 – 22 September 2023

IMPORTANT

Swansea University and the Faculty of Science of Engineering takes any form of academic misconduct very seriously. In order to maintain academic integrity and ensure that the quality of an Award from Swansea University is not diminished, it is important to ensure that all students are judged on their ability. No student should have an unfair advantage over another as a result of academic misconduct - whether this is in the form of Plagiarism, Collusion or Commissioning.

It is important that you are aware of the **guidelines** governing Academic Misconduct within the University/Faculty of Science and Engineering and the possible implications. The Faculty of Science and Engineering will not take intent into consideration and in relation to an allegation of academic misconduct - there can be no defence that the offence was committed unintentionally or accidentally.

Please ensure that you read the University webpages covering the topic – procedural guidance here and further information here. You should also read the Faculty Part One handbook fully, in particular the pages that concern Academic Misconduct/Academic Integrity. You should also refer to the Faculty of Science and Engineering proof-reading policy and this can be found on the Community HUB on Canvas, under Course Documents.

Welcome to the Faculty of Science and Engineering!

Whether you are a new or a returning student, we could not be happier to be on this journey with you.

This has been a challenging period for everyone. The COVID-19 pandemic has prompted a huge change in society as well as how we deliver our programmes at Swansea University and the way in which you study, research, learn and collaborate. We have been working hard to make sure you will have or continue to having an excellent experience with us.

We have further developed some exciting new approaches that I know you will enjoy, both on campus and online, and we cannot wait to share these with you.

At Swansea University and in the Faculty of Science & Engineering, we believe in working in partnership with students. We work hard to break down barriers and value the contribution of everyone. Our goal is an inclusive community where everyone is respected, and everyone's contributions are valued. Always feel free to talk to academic staff, administrators, and your fellow students - I'm sure you will find many friendly helping hands ready to assist you.

We all know this period of change will continue and we will need to adapt and innovate to continue to be supportive and successful. At Swansea we are committed to making sure our students are fully involved in and informed about our response to challenges.

In the meantime, learn, create, collaborate, and most of all – enjoy yourself!

Professor Johann (Hans) Sienz Interim Pro-Vice Chancellor/Interim Executive Dean Faculty of Science and Engineering



Faculty of Science and Engineering	
Interim Pro-Vice Chancellor/Interim Executive Dean	Professor Johann Sienz
Head of Operations	Mrs Ruth Bunting
Associate Dean – Student Learning and Experience (SLE)	Professor Paul Holland
School of Engineering and Applied Sciences Head of School: Professor Serena Margadonna	
School Education Lead	Professor Simon Bott
Head of Sport and Exercise Sciences	Professor Liam Kilduff Dr Laura Mason
Sport and Exercise Sciences Programme Director	Dr Nick Owen n.j.owen@swansea.ac.uk
Year 1 Coordinator	Dr Richard Metcalfe R.S.Metcalfe@Swansea.ac.uk

STUDENT SUPPORT

The Faculty of Science and Engineering has two **Reception** areas - Engineering Central (Bay Campus) and Wallace 223c (Singleton Park Campus).

Standard Reception opening hours are Monday-Friday 9am-5pm.

The **Student Support Team** provides dedicated and professional support to all students in the Faculty of Science and Engineering. Should you require assistance, have any questions, be unsure what to do or are experiencing difficulties with your studies or in your personal life, our team can offer direct help and advice, plus signpost you to further sources of support within the University. There are lots of ways to get information and contact the team:

Email: <u>studentsupport-scienceengineering@swansea.ac.uk</u> (Monday–Friday, 9am–5pm)

Call: +44 (0) 1792 295514 and 01792 6062522 (Monday-Friday, 10am–12pm, 2–4pm).

Zoom: By appointment. Students can email, and if appropriate we will share a link to our Zoom calendar for students to select a date/time to meet.

The current student **webpages** also contain useful information and links to otherresources:

https://myuni.swansea.ac.uk/fse/coe-student-info/

READING LISTS

Reading lists for each module are available on the course Canvas page and are also accessible via http://ifindreading.swan.ac.uk/. We've removed reading lists from the 22-23 handbooks to ensure that you have access to the most up-to-date versions. Access to print material in the library may be limited due to CV-19; your reading lists will link to on-line material whenever possible. We do not expect you to purchase textbooks, unless it is a specified key text for the course.

THE DIFFERENCE BETWEEN COMPULSORY AND CORE MODULES

Compulsory modules must be **pursued** by a student.

Core modules must not only be **pursued**, but also **passed** before a student can proceed to the next level of study or qualify for an award. Failures in core modules must be redeemed.

Further information can be found under "Modular Terminology" on the following link -

https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-

info-taught-students/your-programme-explained/

Year 1 (FHEQ Level 4) 2022/23

Sport and Exercise Science
BSc Sport and Exercise Science[C600]
BSc Sport and Exercise Science with a Year Abroad[C601,C601]

Coordinator: Dr RS Metcalfe

Semester 1 Modules	Semester 2 Modules
SR-141	SR-144
Human Anatomy	Foundations in Exercise Science
15 Credits	15 Credits
Dr L Mason	Prof J Hudson/Dr R Churm
SR-142	SR-145
Introduction to Biomechanics 1	Human Physiology
15 Credits	15 Credits
Dr C Starbuck/Dr NJ Owen	Dr RS Metcalfe
SR-143	SR-146
Research Methods & Ethics	Introduction to Biomechanics 2
15 Credits	15 Credits
Dr SM Heffernan/Mr LM Davies	Prof NE Bezodis/Dr C Starbuck
SR-148	SR-147
Foundations of Sport Psychology	Sport Performance Science
15 Credits	15 Credits
Prof CJ Knight/Prof J Hudson	Dr M Waldron/Mr LM Davies
Total 120 Credits	

SR-141 Human Anatomy

Credits: 15 Session: 2022/23 September-January

Pre-requisite Modules: Co-requisite Modules: Lecturer(s): Dr L Mason

Format: Lectures 17 hours

e content 11 hours Labs/Workshops 2 hours

Contact Hours will be delivered through a blend of live activities online and on-campus, and may include, for example, lectures, seminars, practical sessions and Academic Mentoring sessions.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

17 x 1 hour lectures

11 x 1 hour e content

2 x 1 hour lab/workshops

Module Aims: The purpose of the module is to develop knowledge and understanding of the structure and function of the following systems of the human body: skeletal system, muscular system, articular system, nervous system, endocrine system, digestive system and urinary system.

Module Content: 1. Tissues and cellular organisation in multicellular organisms

Tissues: epithelia, muscle, nerve, connective Cellular organisation: tissues, organs, systems

2. The musculoskeletal system

Skeletal system: skeleton and joint support structures, functions of the skeleton, axial skeleton and appendicular skeleton

Muscular system: structure of muscle, pennate and non-pennate fibre arrangements.

Muscle function: muscle contraction, anatagonistic pairs of muscles, force transmission, control of joint movements.

Categories of movement: upright posture, transport, manipulation of objects

Loading on the musculoskeletal system: effects of open chain arrangement of the bones.

3. Connective tissues

Ordinary connective tissues: areolar tissue, regular collagenous connective tissue

Special connective tissues: cartilage, bone.

4. The articular system

Structural classification of joints. Fibrous joints : syndesmoses

Cartilaginous joints: synchondroses, symphyses

Synovial joints

5. The nervous system

Structural division of the nervous system.

Neurones: structure, types.

Spinal cord: gray matter, white matter, dorsal root, ventral root

Spinal nerves: epineurium, perineurium, endoneurium

6. The neuromuscular system

Muscle fibre structure and function: sliding filament theory; motor units.

Kinaesthetic sense and proprioception: types of proprioceptors

Mechanical characteristics of musculotendinous units: length-tension relationship; force-velocity relationship.

Muscle architecture and function: roles of muscles; muscle fibre arrangement and force and excursion; biarticular muscles.

Stretch-shorten cycle; storage and use of elastic strain energy.

7. The endocrine system

Hormonal and neural control of body functions

Endocrine glands, neuroendocrine glands, autocrines and paracrines.

Hormones: amino acid-based and steroids; effects of hormones; regulation of hormones.

8. The digestive system

The alimentary canal and accessory digestive organs

Digestive processes: ingestion, swallowing, peristalsis, digestion, absorption, defecation.

9. The urinary system

Components of the urinary system: kidneys, ureter, bladder.

Kidneys: cortex, medulla, pelvis, blood supply, nephrons.

Urine: formation, regulation of concentration and volume

Intended Learning Outcomes: By the end of this module the student will be expected to be able to:

- 1. Identify and distinguish between the four basic types of tissues and cellular organisation in multicellular organisms
- 2. Identify and label the composition of the musculoskeletal system
- 3. Classify and explain the structure of ordinary connective tissues, cartilage, and bone
- 4. Recognise and describe the structure of the following organ/tissue systems:

articular, nervous, neuromuscular, endocrine, digestive, urinary.

Assessment: Class Test 1 - Coursework (10%)

Examination (50%)

Class Test 1 - Practical Assessment Not Exam Cond (10%)

Class Test 2 - Coursework (10%) Class Test 3 - Coursework (10%) Class Test 4 - Coursework (10%)

Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: A written examination in January will make up 50% of the mark for the module

Students will also be assessed using small weighted continuous assessments during the semester. Four of these will be online tests and one will be practical lab assessment using virtual reality. Each is worth 10% of the mark for the module.

Moderation approach to main assessment: Universal second marking as check or audit

Assessment Feedback: Written feedback based on cohort performance will be made available for exam questions.

Online feedback will be provided following the online tests.

Immediate feedback will be given during the virtual reality based assessment.

There will be numerous possibilities for students to gain informal feedback across the module as a whole these include, but are not limited to:

Formative e-content assessments which provide regular weekly feedback.

Office drop in sessions

Asking questions during lectures and practical sessions

Informal discussion and seeking advice during lectures or using Canvas discussion groups

Failure Redemption: A supplementary examination will form 100% of the module mark.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-142 Introduction to Biomechanics 1

Credits: 15 Session: 2022/23 September-January

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Dr C Starbuck, Dr NJ Owen

Format: 22 hours lectures

9 hours practicals

Contact Hours will be delivered through a blend of live activities online and on-campus, and may include, for example, lectures, seminars, practical sessions and Academic Mentoring sessions.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

Lecture, blended and practical labs.

Lab 1 Analysis of human centre of gravity and anthropometry (formative assessment)

Lab 2 Introduction to gait analysis and force platforms (formative assessment)

Module Aims: The purpose of the module is to introduce and develop knowledge and understanding of the fundamental mechanical concepts and principles that underlie human movement.

Module Content: Biomechanics

Mechanics of human movement: forms of linear and angular human motion, force, mechanics, biomechanics, technique.

Linear kinematics of human motion: The adaptation of the equations for uniformly accelerated motion to non-linear human motion. The athlete modelled as a projectile.

Applied athletic testing using force platforms

Investigation into the meaning and position of the whole body centre of gravity for human subjects

Intended Learning Outcomes: At the end of the module the learner is expected to be able to:

- 1. State and manipulate the common SI biomechanical units.
- 1. Differentiate mechanics, biomechanics, kinematics and kinetics.
- 2. State and apply Newton's laws of motion in relation to linear biomechanics motion.
- 4. Analyse 1-D and 2-D kinematic and kinetic human activity.

Assessment: Examination 1 (80%)

Class Test 1 - Practical Assessment Not Exam Cond (10%) Class Test 2 - Practical Assessment Not Exam Cond (10%)

Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: Examination (80%) - online Canvas assessment

Two laboratory practical assessments (10% each) [class tests 1 and 2] - Canvass online assessment

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Individual written feedback will be provided alongside the marking scheme used to assess the coursework

Written feedback based on cohort performance will be made available for exam questions

Failure Redemption: A supplementary examination will form 100% of the module mark.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-143 Research Methods & Ethics

Credits: 15 Session: 2022/23 September-January

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Dr SM Heffernan, Mr LM Davies

Format: 11 x 2 hour lectures

7 x 2 hour lab workshops 10 x 1 hour Blended Learning

Delivery Method: Lectures and practical lab workshops

11 x 2 hour lectures 7 x 2 hour lab workshops

All delivery is campus and online based.

Module Aims: This module introduces students to the research methods used in Sport and Exercise Sciences, including a range of research ethical issues that often arise. Students will develop fundamental knowledge and understanding of elementary concepts and principles of research methods including sourcing information, research design, research writing and conducting basic qualitative and quantitative data collection / analysis. Students will also be active in disputing the ethical responsibilities associated with completing research.

Module Content: The syllabus for the lecture based element of the course will include:

An introduction to the philosophy of research

Types of research and research design. Quantitative and Qualitative research

Testing a hypothesis

Research writing

Variables and measurement scales

Normal Distribution, power, error and effect size

Parametric and nonparametric statistics

Developing trustworthy qualitative research

The syllabus for the workshops will include:

Literature searching and referencing

Questionnaire design

Conducting interviews/focus groups

Excel skills

Testing for Normality

Examining relationships between variables

Introduction to the T-Test

Intended Learning Outcomes: By the end of this module the student will be expected to be able to:

- 1. Research and appropriately reference a topic using a variety of resources
- 2. Recognise the different types of data which may occur in sports science
- 3. Demonstrate an understanding of experimental research and standard statistical tests
- 4. Develop an understanding of the principles underpinning qualitative research

Assessment: Examination (50%)

Compulsory assessment (10%) Compulsory assessment (40%)

Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: Examination (50% total mark) = 1 hour examination. Part multiple choice and part short-question format.

Multiple, weekly in class MCQ tests accumulating to 10% of total mark (i.e. 5 tests at 2% per test).

Multiple, weekly 1 page assignments base on quantitative workshops, accumulating to 40% of total mark (i.e. 5 tests at 8% per assignment).

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Students will receive individual written feedback, generic class feedback and the opportunity for verbal feedback on their assessment.

Failure Redemption: A supplementary examination will form 100% of the module mark.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-144 Foundations in Exercise Science

Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Prof J Hudson, Dr R Churm

Format: 11 x 1 hour lectures

11 x 2 hour seminars/workshops

Contact Hours will be delivered through a blend of live activities online and on-campus, and may

include, for example, lectures, seminars, workshops and Academic Mentoring sessions.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus.

11 x 1 hour lectures

11 x 2 hour seminars/workshops

Module Aims: This module will introduce principles of exercise science in relation to health and disease from public health and psychosocial perspectives. National recommendations for physical activity and health across the lifecourse, as well as national policies and approaches will be studied. Students will also develop foundation practical skills and will contextualise these skills in relation to professional work. Students will be expected to apply their skills to selected case studies.

Module Content:

Introduction to Exercise and Health Science

Physical Activity Epidemiology

Physical Activity Dose-Response

Determinants of Physical Activity

Public Health Policy

Physical Activity Participation Across the Life-course

Skills of Exercise Professionals

Physical Activity, Exercise and Well-Being

Obesity, Eating Disorders and Exercise

Intended Learning Outcomes: By the end of this module the student will be expected to be able to:

- 1. Describe a case for physical activity and exercise in relation to health over the life course.
- 2. Discuss the psychosocial influences on, and outcomes from, participation in physical activity and exercise.
- 3. Discuss the epidemiological principles of physical activity and health.
- 4. Identify policies and guidance that promote public health.

Assessment: Coursework 1 (60%)

Coursework 2 (40%)

Assessment Description: Coursework 1 – Individual 60%

Practical report (2250 words maximum)

Students will produce a written practical report discussing two of the practicals carried out in the module workshops.

Coursework 2 – Group 40%

Podcast (approximately 10 minutes)

In groups of 3, students will produce a podcast of up to 10 minutes that discusses a contemporary topic that is covered in the module. The podcast will make use of scientific evidence and literature but will be accessible to a lay audience.

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback:

Individual written or oral feedback will be provided alongside the marking scheme used to assess Coursework 1. Group written or oral feedback will be provided alongside the marking scheme used to assess Coursework 2.

Failure Redemption: Students will redeem failure by resubmitting the failed component as originally set (for Coursework 2, if necessary, students will submit an individual podcast).

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-145 Human Physiology

Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Dr RS Metcalfe

Lectures (22-h) and Seminars (11-h). Format:

Contact Hours will be delivered through a blend of live online lectures and seminars.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

The module consists of lectures and seminars. All lecturers will be recorded and made available via Canvas. Live delivery will be supplemented with online (blended) learning materials and activities to be completed at home.

Module Aims: The purpose of the module is to provide a basic introduction to the physiological systems and metabolic processes responsible for the production and utilisation of energy both at rest and during physical activity. This module is lecture and seminar based and is intended to develop introductory knowledge and understanding on the structure and function of the human body from cellular to gross body systems fundamental to the study of sports and exercises. The module practically investigates how to assess the physiological and biochemical state at rest and during

Module Content: The module will include:

- 1. Basic Biochemistry understanding of units and relevant definitions.
- 2. The Cell functional components with reference to differences between cell types.
- 3. Nutrients the digestive system, the basis of the chemical structures of carbohydrates, amino acids and lipids and their metabolism
- 4. Acid-Base Balance the concept of pH, alkalosis and acidosis. Sources of H+ ions & pH regulation by organs. Changes in pH with exercise.
- 5. PCr hydrolysis and glycolysis: its role in maximal exercise metabolism.
- 6. Aerobic metabolism, glucose, lipids, oxidative phosphorylation, the electron transport chain and their roles in submaximal exercise.
- 7. The cardiovascular system structure and its function in response to exercise.
- 8. The respiratory system structure and its function in response to exercise.

Intended Learning Outcomes: At the end of the module the learner is expected to be able to:

- 1. Describe the gross anatomical structure of the major components of the: cardiovascular system, respiratory system, digestive system, endocrine system and urinary/renal system.
- 2. Describe cardiac and peripheral circulation and the physiological control of the cardiovascular system.
- 3. Describe the processes of inspiration, expiration, gaseous exchange and explain the control of respiration.
- 4. Describe the functional relationships between endocrine glands and their regulation of physiological function.
- 5. Describe the digestion and absorption of carbohydrates, fats and proteins.
- 6. Describe renal control of water, electrolytes and acid/base balance.
- 7. Observe and describe the effect of progressive exercise on the cardiovascular and respiratory systems.

Assessment: Examination 1 (80%)

Coursework 1 (2%)

Coursework 2 (2%)

Coursework 3 (2%)

Coursework 4 (2%)

Coursework 5 (2%)

Coursework 6 (2%)

Coursework 7 (2%)

Coursework 8 (2%)

Coursework 9 (2%) Coursework 10 (2%)

Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: Students will complete a series of weekly online Canvas quizzes (20% of the module) and a written examination (80% of the module). The written examination will consist of a combination of multiple choice, short answer and essay based questions.

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Students will receive feedback on their weekly online Canvas quizzes, including guidance on any incorrectly answered questions. Written feedback based on cohort performance will be made available for exam questions.

Failure Redemption: A supplementary examination will form 100% of the module mark

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-146 Introduction to Biomechanics 2

Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Prof NE Bezodis, Dr C Starbuck

Format: 22 hours lecture based

11 hours practical based

Contact Hours will be delivered through a blend of live activities online and on-campus, and may include, for example, lectures, seminars, practical sessions and Academic Mentoring sessions.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

Lectures, practical laboratory classes, blended learning (online workshop sessions) and directed independent study.

Module Aims: The purpose of the module is to develop knowledge and understanding of the fundamental mechanical concepts and principles that underlie human movement. The module introduces angular motion and the study of kinetics.

Module Content: Introduction to angular kinematics

Advanced projectile motion

Aerial and rotational motion

Linear kinetics

Friction

Impacts

Air resistance

Work, energy, and power

Angular kinetics

Musculoskeletal levers

Video-based measurement and analysis of biomechanical variables

Intended Learning Outcomes: At the end of the module the learner is expected to be able to:

- 1. Remember and apply fundamental laws of human motion.
- 2. Apply mathematical calculations to 'real-life' human motion examples.
- 3. Analyse simple 1-D and 2-D kinematic data.

Assessment: Examination 1 (80%)

Class Test 1 - Practical Assessment Not Exam Cond (10%) Class Test 2 - Practical Assessment Not Exam Cond (10%)

Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: Examination (80%) Two laboratory practical assessments (10% each)

Moderation approach to main assessment: Universal second marking as check or audit

Assessment Feedback: Verbal feedback based on cohort performance will be made available for laboratory practical assessments

Written feedback based on cohort performance will be made available for exam questions

Failure Redemption: A supplementary examination will form 100% of the module mark.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

PENALTY: The Faculty of Science and Engineering has a ZERO TOLERANCE penalty policy for late submission of all coursework and continuous assessment, including non-attendance at designated assessed labs.

SR-147 Sport Performance Science

Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Dr M Waldron, Mr LM Davies

Format: 11 x 2 hr lectures

4 x 2 hr labs

Contact Hours will be delivered through a blend of live activities online and on-campus, and may include, for example, lectures, seminars, practical sessions and Academic Mentoring sessions.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

The module consists of lectures and field-based practical's. Lectures will be recorded and made available via Canvas wherever possible. Face to face delivery will be supplemented with online (blended) learning materials.

Module Aims: This module provides the students with an insight into the roles that Sports Physiology, Sports Biomechanics and Strength & Conditioning play in elite sport. The module takes the students through the process of working within elite sport and covers topics, such as how to quantify the demands of athletes across different sports, how to conduct a needs analysis, designing testing and training programmes, and how to practically implement these in a performance science setting.

Module Content: 1. Performing needs analysis on athletes

- 2. Preparing an athlete using warm-up
- 3. Testing and training of sprint athletes
- 4. Testing and training of middle-distance athletes
- 5. Testing and training of endurance athletes
- 6. Testing and training of intermittent athletes
- 7. Special training considerations

Intended Learning Outcomes: By the end of the module, each learner is expected to be able to:

- 1. Evaluate ways to quantify the demands of athletes across a variety of sports
- 2. Explore and evaluate concepts relating to the testing and measurement of athletes
- 3. Describe the theoretical and practical reasons for selected practices in sports performance science
- 4. Demonstrate understanding of the practical application of performance science principles with athletes

Assessment: Coursework 1 (80%)

Group Work - Coursework (20%)

Resit Assessment: Coursework reassessment instrument (100%)

Assessment Description: Students will be required to complete a 2500 word assignment and deliver a group poster presentation

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Students will receive cover sheets with qualitative and quantitative feedback and examples of good practice for both of the assessment components. Individual written feedback will be provided alongside the marking scheme used to assess the work.

Failure Redemption: Supplementary coursework will form 100% of the module mark, provision will be made for supporting data to be gathered.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

SR-148 Foundations of Sport Psychology

Credits: 15 Session: 2022/23 September-January

Pre-requisite Modules: Co-requisite Modules:

Lecturer(s): Prof CJ Knight, Prof J Hudson

Format: Blended learning. It is anticipated that this delivery will occur online with on-campus delivery provided

as much as possible, pending government restrictions. It is anticipated that this module will comprise 20

hours of lectures and 20 hours of seminars.

Delivery Method: All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week.

Module Aims: The module will provide students with an understanding of core psychological dimensions of sport. Students will examine fundamental theories of sport psychology, covering topics such as motivation, competence, anxiety and the role of significant others in sport. The module provides an essential base for progression to the level 2 module SR-260: Contemporary themes in sport psychology, where recent psychological theories and research relating to a range of areas are discussed.

Module Content: Overview of sport psychology

Sport psychology across the lifespan

Participation motives and attrition

Theories of motivation

Competence

Self-confidence and self-efficacy

Anxiety and stress

Influence of significant others

Intended Learning Outcomes: By the end of this module the student will be expected to be able to:

- 1) Define and describe sport psychology as an academic discipline
- 2) Demonstrate an awareness of the role of sport psychology in relation to athletes' participation in sport.
- 3) Describe and explain fundamental theories of sport psychology
- 4) Relate fundamental theories of sport psychology to athletes
- 5) Explain the role of significant others in sport
- 6) Communicate knowledge about sport psychology to different audiences (i.e., academics, practitioners, coaches/parents).

Assessment: Assignment 1 (25%)

Assignment 2 (35%) Assignment 3 (40%)

Resit Assessment: Assingment resit (25%)

Assingment resit (35%) Assingment resit (40%)

Assessment Description: Students will complete three assignments for this module as follows:

Assignment 1: 25%

Students will complete a 500 word blog with additional tasks describing sport psychology and the associated benefits and issues with the discipline.

Assignment 2: 35%

Students will produce an infographic and accompanying brief video to explain two theories of motivation.

Assignment 3: 40%

Students will produce a 1000 word academic assessment explaining and critiquing two theories covering 2 of the final three topics covered in the module.

Further information on all assignments will be provided on canvas and in lectures.

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Feedback is provided in the following format to students:

- 1) Feedback will be provided to students on ongoing portfolio submissions, with a requirement for them to demonstrate how they are acting on feedback
- 2) A powerpoint presentation dedicated to module feedback covering general points on the on going portfolio will be developed and delivered.
- 3) Follow-up one to one tutorial sessions are offered for students to further discuss their module performance with the module convener.

Failure Redemption: If a student fails this module, they will have an opportunity to redeem failure only on the assessment components that they failed (i.e. each component of the portfolio that they failed). That is, if a student fails this module and the student's combined mark for the three components of the in class test (class test 1) equates to a fail they will have an opportunity to seek to redeem failure through a resubmission of the particular parts of the portfolio that they failed (rather than resubmitting the entire portfolio of work).

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

The Faculty of Science and Engineering has a ZERO TOLERANCE policy for late submission of coursework.