Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 3 (FHEQ LEVEL 6)

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 3 Coordinator	Dr John William Devine j.w.devine@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 studentsin 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: studentsupport-scienceengineering@swansea.ac.uk (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 3 (FHEQ Level 6) 2022/23
Sport and Exercise Science
BSc Sport and Exercise Science[C600]
BSc Sport and Exercise Science with a Year Abroad[C601]

Coordinator: Dr J Devine

SR-311 **Sport and Exercise Sciences Research Dissertation** **40 Credits** **Dr SM Heffernan/Dr R Churm**
Total 120 Credits

Optional Modules

Choose a minimum of 20 credits

You should select exactly four module options (80 credits) in year 3. Each optional module will be taught in a single teaching block (TB1 or TB2) and you should choose a minimum of one module option (20 credits) in each teaching block. Note that you may only choose Biomechanics (SR-305) if you have studied SR-258 in Year 2; Psychology (SR-326) if you have studied SR-260 in Year 2; and Physiology (SR-334) if you have studied SR-253 in Year 2

SR-305	Sports Biomechanics	Dr NJ Owen	TB1	20
SR-333	Sport, Diet and Disease	Dr TD Love/Dr SM Heffernan/Dr RS Metcalfe/..	TB1	20
SR-367	Exercise, Growth and Development	Dr O Roldan Reoyo	TB1	20
SR-368	Sport Integrity, Ethics and Policy	Dr J Devine/Dr AN Harvey	TB1	20

And

Choose a minimum of 20 credits

You should select exactly four module options (80 credits) in year 3. Each optional module will be taught in a single teaching block (TB1 or TB2) and you should choose a minimum of one module option (20 credits) in each teaching block. Note that you may only choose Biomechanics (SR-305) if you have studied SR-258 in Year 2; Psychology (SR-326) if you have studied SR-260 in Year 2; and Physiology (SR-334) if you have studied SR-253 in Year 2

SR-314	Health Related Exercise	Prof G Stratton/Dr R Churm/Prof J Hudson/..	TB2	20
SR-326	Applied Sport Psychology	Dr D Hill	TB2	20
SR-334	Sport and Exercise Physiology	Prof RM Bracken	TB2	20

SR-305 Sports Biomechanics

Credits: 20 Session: 2022/23 September-January

Pre-requisite Modules: SR-258

Co-requisite Modules:

Lecturer(s): Dr NJ Owen

Format: 22 hrs lectures and 44 hours labs workshops and seminars
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, seminar, practical, directed independent study.
Lab 1 Basic controls of the force platform
Lab 2 Use of the force platform for muscle function tests 1
Lab 3 Use of the force platform for muscle function tests 2
Lab 4 Comparison of estimates of power measurement

Module Aims: The purpose of the module is to develop competence in biomechanical analysis of human movement and its application to sporting situations. The module builds upon the concepts, principles and methods established in the level 1 module SR-142, SR-146 and the level 2 module SR-254.

Module Content: • Non-uniformly accelerated motion in biomechanics.
• External forces acting on the human body as a projectile.
• Use of force platforms in muscle function tests.
• Limitation of regression models when applied to power estimation.
• Forward and inverse dynamics approaches to quantitative human motion analysis.
• Skeletal muscle mechanics.

Intended Learning Outcomes: At the end of the module the learner is expected to be able to:
1. Analyse muscle function with the use of a force platform
2. Apply the forward and inverse dynamics approaches to quantitative analysis of human movement particularly neuromuscular function testing.
3. Collect and report 2-D kinematic and kinetic analyses of human performance in athletic activity using a force platform.
4. Describe and analyse the stretch-shorten cycle in skeletal muscle function.
5. Determine joint contact forces in 2-D simplified joint systems

Assessment: Examination 1 (70%)
Class Test 1 - Practical Assessment Not Exam Cond (10%)
Class Test 2 - Practical Assessment Not Exam Cond (10%)
Class Test 3 - Practical Assessment Not Exam Cond (10%)
Resit Assessment: Examination (Resit instrument) (100%)

Assessment Description: The module is assessed via lab quizzes (coursework 1) (timed online assessments) during semester 2 (3 x 10% of total mark) and a timed online assessment examination (or traditional exam) at the end of Semester 2 (70% of total mark).

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

Assessment Feedback: Feedback will be received during scheduled feedback sessions within 3 weeks of the end of an assignment. Written feedback will be provided on Canvas for examinations.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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 penalty policy for late submission of all coursework and continuous assessment.

Lecture and lab notes for this module can be found on Canvas.

Not available to visiting and exchange students

SR-258 is pre-requisite for SR-305

SR-311 Sport and Exercise Sciences Research Dissertation

Credits: 40 Session: 2022/23 September-June

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr SM Heffernan, Dr R Churm

Format: Formal Lectures 13 hours
Directed private study (incl. meetings with supervisors 387 hours)

Contact Hours will be delivered through a blend of live activities online and on-campus (if possible), and includes lectures 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 (dependent on timetabling). Students may also have the opportunity to engage with online versions of sessions delivered on-campus.

This module, specifically, largely consists of independent programmes of research conducted by the student under the supervision of an academic member of staff. Each student will be required to attend a number of supervision sessions and in addition will be expected to meet their supervisor as determined by their individual needs.

In addition to independent work, the module includes a number of lectures that focus on supporting students to develop the skills and understanding to develop research questions, proposals, presentations and research papers.

Module Aims: The module involves the application of scientific principles to the solution of a practical or theoretical problem associated with Sport and Exercise Sciences that is presented in the form of a final research paper. The student will gain experience in working independently on a substantial, individual project, using accepted planning and ethical procedures. This process will require and develop self-organisation and the critical evaluation of options and results, as well as developing technical and academic knowledge in the chosen topic.

Module Content: - The nature of the research project varies from one student to another. The allotted project may involve a review of the literature, theoretical or experimental studies or computational studies. The academic staff of the School of Sport and
Exercise Sciences will produce a list of project descriptors and students will be given a chance to select a project, or, pursue an agreed self-defined project with a named supervisor.
- Each student will be provided with an individual project and a supervisor. It is recommended that students meet their supervisors regularly to discuss progress.
- Briefings on ethical applications, project management, research techniques, record keeping, paper preparation and presentation skills will be given. Precise deadlines, submission formats and instructions will be disseminated via the Canvas web site.
- A Research Proposal will be prepared by the student to be presented mid November.
- An ethical application will usually be required by mid October but this is not assessed.
- A first draft of a scientific paper must be prepared by March/April.
- A final paper must be submitted in May.
- Each student will prepare and deliver an oral presentation and undertake a viva at the end of the project period to two members of academic staff.

Intended Learning Outcomes: After completing this module you should be able to:

- Propose the development of a research question in some depth, largely on your own initiative, and carry out research to address this question
- Reflect on developments and progress in relation to a planned project schedule
- Compose oral presentations on project progress and the results obtained and defend the research against critical appraisal
- Write a journal style paper on the project work

Transferable skills:

You will have assessed your own verbal, numerical and abstract reasoning skills. You will have developed personal reflection skills, research skills, time and project management, risk assessment and safe working, and your communication skills.

Assessment: Oral Examination (10%)
Coursework 1 (50%)
Coursework 2 (10%)
Viva (30%)

Resit Assessment: Coursework reassessment instrument (100%)

Assessment Description: Research Proposal = 10% (Oral Examination)
Write-Up (paper) = 50% (Coursework 1)
Process Engagement and Independence = 10% (Coursework 2)
Viva = Oral Presentation = 15% (Oral Examination) and Oral Viva = 15%

Moderation approach to main assessment: Universal non-blind double marking

Assessment Feedback: Oral feedback through regular meetings with a supervisor, and written feedback via Turnitin/Canvas Gradecentre following formal assessment component assessments from coordinator, supervisor and second assessor.

Failure Redemption: There is no failure redemption for this module. Failure in this module would normally result in an exit qualification due to insufficient credits having been attained.

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

Only available to students following the Sport and Exercise Sciences Degree Programme.

The compulsory submissions are a research proposal presentation, a risk assessment, an ethical approval application (where necessary) and a research paper. In addition, the student must attend an oral presentation at which the dissertation results will be presented and the questions will be posed by assessors.

The Faculty of Science and Engineering ZERO TOLERANCE penalty policy for late submission of coursework and continuous assessment will apply to all assessment elements apart from the final paper submission, final oral presentation and viva. Any late submissions on the final paper (not covered by extenuating circumstances) will be capped at 40%. Any late submissions on the final oral presentation (not covered by extenuating circumstances) will be capped at 40%. If a student fails to attend their scheduled Viva (not covered by extenuating circumstances) rescheduling may be permitted but the defence component will be capped at 40%.

Not available to visiting and exchange students.

SR-314 Health Related Exercise

Credits: 20 Session: 2022/23 January-June

Pre-requisite Modules:

Co-requisite Modules:

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

Format: 6 hours lectures
14 hours workshops
10 hours blended learning
6 hours field work
8 hours group work
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

Practical and Lecture Based:

6 hours lectures
14 hours workshops
10 hours blended learning
6 hours field work
8 hours group work

There are 4 areas where you will develop your practical and professional experience:
1. Working with adults to assess their physical activity, fitness and health.
2. To experience what life is like as an older person you will take part in Virtual Reality workshops to sensitise you to specific concepts and factors related to ageing and physical activity.
3. There will be 2 laboratory workshops where you will learn about laboratory measures related to musculoskeletal health and cardiovascular disease.
4. Field visits that include older people, adults and their experiences, lifestyles and behaviours using a blend of public health methodologies.

From the start of the module you will work in "expert groups." Each expert group will nominate a leader who will coordinate activity within the group. Expert groups will present their work once as a group. Subsequently student will produce one individual written assignment.

Module Aims: Physical inactivity and sedentary time create a significant burden on global health. The science that underpins the relationship between physical activity and health has grown considerably over the past 10 years. The World Health Organisation ranks physical inactivity as the 4th largest non-communicable disease related to early death, one place above obesity and the interdisciplinary science in psychology, physiology, biomechanics fuse together in this module. You will work with adults and older people to better understand the factors affecting health, fitness, quality of life and wellbeing and will use public health and field science approaches in workshops and practical to complement your traditional laboratory skillset. The module uses summary science ushc as systematic reviews, meta-syntheses and meta-analyses to study what works to improve physical activity health and wellbeing in the population. You will be expected to understand case studies and how exercise may affect health and wellbeing and will work on your own and in a group to demonstrate your knowledge both verbally and in writing. Be prepared to recruit friends and family as case studies to complete practical activity and assessment included in the module. Students wishing to work in the health and fitness industry, public health, health promotion, allied health professions, teaching or clinical areas would most benefit from participation in the module.

Module Content: 1) Physical activity and fitness in adults
2) Functional fitness and wellbeing in older people
3) Principles of behaviour change
4) Musculoskeletal health
5) Cardiovascular disease
6) National Exercise Referral Scheme
7) Meta-analyses and meta-syntheses.

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

1. Use current systematic reviews, meta analyses and meta syntheses to critically analyse the effectiveness of physical activity promotion programmes.
2. Use systematic reviews, meta-analyses and meta syntheses to interpret exercise benefits in at risk groups.
3. Appraise the risks and benefits associated with regular exercise and physical activity.
4. Analyse the acute and chronic metabolic benefits associated with exercise and physical activity.
5. Assess current physical activity and fitness status and critically apply the appropriate guidelines for physical activity programmes.
6. Work individually and as a group when seeking solutions to academic and real problems in promoting physical activity, health and wellbeing in children and older adults.
7. Develop a critical appreciation of laboratory and field approaches appropriate for use in public health and exercise science.
8. Integrate evidence from different scientific disciplines in the context of adults and older adults physical activity, health and wellbeing.

Assessment: Group Work - Presentation (40%)
Coursework 2 (60%)

Resit Assessment: Coursework reassessment instrument (100%)

Assessment Description: Group Work Presentation - 40% (to be recorded via zoom)
Coursework 2 - 60%

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

Assessment Feedback: Students will received formal feedback on all pieces of assessed work. This will be verbal and written as appropriate to the assessment. Feedback will be given as a group for group presentations and individually for written pieces.

There will be numerous possibilities for students to gain informal feedback across the module as a whole these include, but are not limited to:
E-mail.
Peer feedback in expert groups.
Office drop in sessions
Asking questions during lectures
Informal discussion and seeking advice during workshops or field work

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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

PENALTY: ZERO TOLERANCE FOR LATE SUBMISSION

SR-326 Applied Sport Psychology

Credits: 20 Session: 2022/23 January-June

Pre-requisite Modules: SR-260

Co-requisite Modules:

Lecturer(s): Dr D Hill

Format: 16.5 hours on-line live lectures
14 hours of seminars
4 hours lab-based practical
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: The module will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity. In person, live and self-directed on-campus activities will take place each week within seminar groups and lab-based work.

Lecture based
Practical

Module Aims: The module will enable students to put sport psychology theory into practice by examining a range of issues that confront the applied sport psychologist in modern practice. Students will consider how knowledge of Psychological Skills Training (PST) techniques and the fundamental factors of sport performance learnt at levels 1 and 2 can be used in applied sporting settings to deal with these issues.

Module Content: Models of service delivery in applied practice.
Ethical issues in applied sport psychology.
Applied practice interventions.
Providing psychological support for peak performance.
Alleviating catastrophic performance failure in athletes / teams.
Athlete mental health

Intended Learning Outcomes: At the end of the module the learner is expected to be able to:
1. Identify an applied issue in a client (e.g. athlete/coach) and provide a solution through an applicable Psychological Skills Training (PST) programme.
2. Apply Psychological Skills Training (PST) techniques in practical sporting settings.
3. Utilise knowledge of underpinning theory and research to make applicable recommendations for practice.
4. Apply theories of service delivery within a sport psychology practice framework.
5. Understand the factors that contribute to providing psychological support to athletes .
6. Evaluate the incidence of mental health problems in sports settings.

Assessment: Examination 1 (60%)
Coursework 1 (40%)

Assessment Description: Assessment Point 1:

2000 word Case Study (40%).
Based on an appropriate issue covered in the module, students are asked to complete a philosophically-driven, and theoretically informed needs analysis with an athlete. There on in, the student must devise a suitable, evidence-based intervention that addresses the athlete's needs.

Assessment Point 2:
Exam (60%)
A timed case study will comprise of two: athlete, team, or organisational cases. Students will be asked to provide a theoretically informed, evidence-based intervention for both cases.

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

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

1) A lecture session dedicated to module feedback covering general points on the exam/coursework performance of the class.
2) Summary powerpoint slides of the feedback session are placed on Canvas.
3) A summary of the class mark breakdown for coursework/exams with additional comments is available on the engineering intranet site for students to access.
4) All students receive a coursework feedback sheet with marks for each of the assessment criteria together with qualitative comments specific to the assessment criteria.
5) Follow-up one to one tutorial sessions are offered for students to further discuss their module performance with the module convener.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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 penalty policy for late submission of all coursework and continuous assessment

Notes, worked examples and past papers for this module can be found on Canvas

Not available to visiting and exchange students

SR-333 Sport, Diet and Disease

Credits: 20 Session: 2022/23 September-January

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr TD Love, Dr SM Heffernan, Dr RS Metcalfe

Format: Lecture (11 x 2h)
Workshop (9 x 2h)
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, practical and workshop based.

Module Aims: The module will explore the major nutrients of concern in maintaining health and performance in athletes, and the nutrition and related issues surrounding selected diseases.

Module Content: 1. Fluid & Electrolyte Balance
2. Role of macronutrients before, during and after exercise
3. Nutritional Supplementation
4. Bone/Joint Health
5. Sarcopenia
6. Cardiovascular disease
7. Diabetes
8. Obesity

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

1. To discuss the mechanisms underpinning nutrition strategies for health and performance
2. To critically appraise nutrition strategies
3. To analyse the nutrient content of a diet
4. To interpret the appropriateness of a diet
5. To evaluate the effect of nutrient intake on health and performance
6. To synthesise clear evidence-based practical advice

Assessment: 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%)
Assignment 1 (50%)
Assignment 2 (30%)

Assessment Description: The assignment will involve an initial evaluation of a sports participant's diet and relevant issues, followed by the recommendations made by the candidate to improve the person's dietary situation, justified with reference to current literature and guidance. A written report is submitted following the assignment guidance given to the student at the start of the module. This is an individual piece of work.

The formal examination can cover any of the topics discussed during the module.
Assessment Dates as follows :
CW1 14-Oct-22
CW2 21-Oct-22
CW3 28-Oct-22
CW4 04-Nov-22
CW5 11-Nov-22
CW6 18-Nov-22
CW7 25-Nov-22
CW8 02-Dec-22
CW9 09-Dec-22
CW10 16-Dec-22
A1 21-Nov-22
A2 09-Jan-23

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

Assessment Feedback: Individual written and verbal feedback will be provided alongside the marking scheme used to assess the coursework. General feedback on the examination can be made available to students electronically.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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, meaning that a mark of zero will be recorded in such cases.

SR-334 Sport and Exercise Physiology

Credits: 20 Session: 2022/23 January-June

Pre-requisite Modules: SR-253

Co-requisite Modules:

Lecturer(s): Prof RM Bracken

Format: 12 x 2 h Lectures
9 x 4 h 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

Campus lecture theatres and laboratories

Module Aims: The primary aims of the module are to provide a strong theoretical and practical background in the use of current lab and field-based physiological tests used by sports and exercise physiologists in the areas of (i) endurance (ii) sprinting (iii) team sports (iv) strength events. A secondary aim of this module is to explore the impact of alterations in human body thermoregulation on the above mentioned types of exercise.

Module Content: 1. Physiology and biochemistry of endurance exercise
2. Physiology and biochemistry of sprint exercise
3. Physiology and biochemistry of games exercise
4. Physiology and biochemistry of strength exercise
5. Metabolic and physiological perturbations due to alterations in body temperature
6. Laboratories relevant to 1 - 5 (above).

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

1. Demonstrate a critical understanding of the research literature of energy metabolism and the physiological changes pertinent to a variety of sports (assessed by written exam)
2. Apply the research literature to the exploration of the human responses to different exercise test conditions (assessed by laboratory practicals and laboratory report)
3. Critically evaluate the use of laboratory and field-based physiological tests to the improvement of the athlete's training plan (assessed using interactive practicals)

Assessment: Examination 1 (50%)
Laboratory work (50%)

Assessment Description: In-person examination: written exam (3-hours) on theoretical content covered in Semester 1
Laboratory Practical Report: assessment based on data collected from practical and written into a 2000-word report

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

Assessment Feedback: Students will receive feedback on Exam within the scheduled feedback weeks following the Examination period.
Laboratory report feedback will be available 3 weeks following the submission deadline.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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

PENALTY: Faculty of Science and Engineering has a ZERO TOLERANCE penalty policy for late submission of all coursework and continuous assessment

SR-367 Exercise, Growth and Development

Credits: 20 Session: 2022/23 September-January

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr O Roldan Reoyo

Format: 11 1-hour lectures
10 3-hour labs/workshops
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 will be delivered asynchronously via online pre-recorded videos for students to view in their own time prior to the workshops.

Interactive workshops will be conducted live and will require the lecture material to have been viewed in advance.

Module Aims: This module will explore the central tenet that children are not mini-adults and that we can't simply assume their response to exercise and training is a scaled down version of that observed in adults. Indeed, youth are a unique group in which we must distinguish effects of external stimuli such as training from the simultaneous effects of growth and maturation. As we continue to face the global obesity and physical inactivity epidemic, understanding the physiological, psychological and behavioural underpinnings that determine sports performance and participation and physical activity is of ever greater importance.

This module will provide an in depth insight into our current understanding of these issues in healthy children and those with chronic disease.

This module concentrates on the paediatric population and requires a baseline understanding of anatomy and physiology to facilitate the discussions at this level. To explore the unique context of paediatric responses to exercise and how we assess their physical activity levels, this module involves workshops that are centred on data analysis using Excel and SPSS.

Module Content: 1) Biological maturation: Characteristics of normal biological maturation during childhood. Morphological, sexual and skeletal manifestations of maturations. Factors that influence normal biological development.
2) Dimensionality and scaling: The problem of size. Longitudinal comparisons with normative data. Ratio standard. Dimensionality theory. Scaling using allometric equations. Regression standards.
3) Influence of training during childhood and adolescence
4) Physical activity and sports participation patterns, youth drop-out rate and overtraining
5) Exercise and physical activity in the clinical context
6) Early years PA, fundamental movement skills and physical literacy

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

1. Critically discuss the process of growth and maturation and it's interaction with exercise training
2. Discuss and analyse the changes in physical activity and sports participation across childhood and their determinants and correlates
3. Critically consider the issues surrounding clinical conditions in youth and their influence on exercise, growth and development.
4. Explain the concept that children are not mini-adults

Assessment: Assignment 1 (15%)
Oral Examination (35%)
Examination 1 (50%)

Assessment Description: There will be one coursework assignment consisting of two parts:
1) an abstract submitted prior to the presentation
2) an individual oral examination with questions afterwards.

The abstract and individual presentation are based on the data analysis techniques learnt in the workshops and their application to real data provided. The assessment tests the student's ability to accurately and appropriately analyse data having identified a relevant research question and to interpret those findings, applying them to the real world in terms of their application and implications.

There will also be an exam with a choice of 5 essay questions from which the students must choose 3 questions to answer.

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

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

General feedback on the examination will be made available to students electronically.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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

SR-368 Sport Integrity, Ethics and Policy

Credits: 20 Session: 2022/23 September-January

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr J Devine, Dr AN Harvey

Format: 11 x 2 hour lectures plus
Tutorial, Case study and Small Group sessions
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, tutorials, case studies, and small group work.

Module Aims: This module examines the role of ethics in assessing the rationality of practice, policy, and governance in sport. The module will help students to develop a deeper understanding of the ethical dimensions of practical decision making in sport and the philosophical foundations that underlie these ethical debates. Students will come to appreciate the significance of ethics in various sporting contexts, and they will develop their understanding of what constitutes a rationally defensible ethical approach to sport.

Module Content: 1. The nature of ethical argument.
2. Normative theories of sport: a. Formalism; b. Conventionalism; c. Broad internalism.
3. Ethical theories: a. Virtue ethics; b. Consequentialism; c. Deontology.
4. The application of ethical theories to moral problems in sports. Such problems might include: a. Violence and Sport; b. Enhancement and Sport; c. Gender, Eligibility, and Sport, d. Sportsmanship; e. Cheating and Sport; and f. Competition integrity.

Intended Learning Outcomes: By the end of this module, students will be expected to be able to:
1. Demonstrate a critical understanding of at least one moral theory
2. Demonstrate a critical understanding of the nature of sport as an ethical practice
3. Identify and outline a moral problem in sports ethics and/or integrity, and apply a moral theory to that problem
4. Evaluate the strengths and weaknesses of the chosen theory when applied to the problem, and in the light of other theoretical approaches to ethics.

Assessment: Coursework 1 (25%)
Coursework 2 (75%)

Assessment Description: Coursework 1: 25% of the module mark – Short essay, critical notice, presentation, 'policy' document, or blog post (to vary year on year).
Coursework 2: 75% of the module mark – Essay (the Essay will address a practical ethical problem that arises in sport).

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

Assessment Feedback: Individual written feedback on submitted coursework.

Failure Redemption: In line with University regulations, supplementary examinations are not awarded at final year.

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