

Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Sports Injuries and Clinical Methods	SSP7057	C160	2

Level (3 to 8)	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
7	30	15	3.0	0%	Standard Taught Module

Teaching Period	Pre-requisites
September	None

Module Leader	School(s)	Campus
Dr Craig Ranson	Cardiff School of Sport	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment Type	Weighting of Assessment	Approximate Date of Submission
WRIT1 – Essay	2500 words	30%	20 Nov 2017
WRIT2 – Clinical Case Studies	2 sports injury case studies (1,500 words each)	30%	23 Oct 2017 15 Jan 2018
WRIT3 – Clinical examination	30mins	40%	23 Jun 2018
OTHR1 – Sports trauma management	Required as APL or qualification to be completed during Sept attendance block	Pass / Fail	13 Sep 2017

#### Rationale for Assessment and Opportunity for Feedback

Four separate assessments, all of different types, are used to assess the module.

WRIT1 comprises a written submission related to a sports injury management scenario.

WRIT2 requires students to follow a structured 'journal style' format to provide detailed case studies of patients they have managed or observed within their own practice or via clinical placement. Case studies must be related to a provided list of topics/conditions covered during the Sept attendance block.

A single draft submission may be submitted to the relevant member of staff up to, but no later than two-weeks prior to the submission deadline for the WRIT1, and first WRIT2 assignments. The formative feedback for this assessment will take the form of hard edits over the first two pages of the submission supplemented with 3-4 comments of generic feedback related to holistic aspects of the work. This feedback will be provided in email return no later than one-week prior to the deadline.

WRIT3 takes the form of a clinical examination whereby student competency to perform effective and comprehensive subject and objective examination of real patients is assessed by two examiners (typically one Sports Doctor and one Sports Physiotherapist). Students have the opportunity of practice examinations in January after which they receive verbal formative feedback on their progress.

OTHR1 is pass/fail and is based on continuous tutor assessment of the students throughout the day-long sports trauma management course

### Aim(s)

The aim of this module is to develop a sound understanding of human anatomy and patho-anatomy as it relates to sport and exercise related injury and dysfunction. A further aim is to apply that knowledge in the assessment, investigation, management, rehabilitation and prevention of sports and exercise related injury.

### Learning Outcomes

**After studying this module you should be able to:**

- Apply knowledge of surface and functional anatomy to understand the mechanisms of exercise-related injury, and to allow accurate diagnosis utilising appropriate clinical assessment skills
- Critically assess and apply appropriate injury management options
- Understand the nature and causes of gradual onset injuries such as stress fracture and tendinopathy and apply prevention and management strategies
- Competently assess and manage concussion
- Competently provide immediate, pre-hospital management of sports trauma
- Perform a competent clinical examination that includes injury history taking, assessment and diagnoses of musculo-skeletal injuries
- Describe case studies in a logbook, with details of involvement in care, injury; history, examination, investigation, treatment and outcome, and including reflection on each.
- Using an inter-disciplinary approach, demonstrate the ability to identify and mitigate injury risk factors such as contributing biomechanical, equipment, environmental, nutritional, psychological technical and training contributors
- Understand the most common medical imaging modalities used in the investigation of sports injuries

**Learning and Teaching Methods: Range of learning methods (including directed study) and expected scheduled contact time on each:**

Learning Method	Rationale	Type of contact (scheduled/non-	Total hours
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		<b>contact)</b>	
Workshops	To support and guide the students in the skills necessary for clinical examination	Scheduled	15
Lecture	To provide content related knowledge and a starting point /summary of key issues from which students are motivated to explore further.	Scheduled and non-contact (recorded)	30
Guided Independent Study	To develop skills of independent enquiry and becoming an independent/autonomous learner as associated with undertaking a substantial piece of independent work.	Non-Contact	255

**Indicative Content**

The content of the module is updated and revised each year but students can expect to cover topics such as

- ❑ Shoulder Anatomy and Injuries
- ❑ Elbow Anatomy and Injuries
- ❑ Hand & Wrist Anatomy and Injuries
- ❑ Lumbar Spine Anatomy and Injuries
- ❑ Concussion Management
- ❑ Hip and Groin Anatomy and Injuries
- ❑ Knee Anatomy and Injuries
- ❑ Leg, Ankle and Foot Anatomy and Injuries
- ❑ Achilles and Patellar Tendinopathy
- ❑ Rehabilitation Principles and Practice
- ❑ History Taking, Clinical Reasoning and Medical Record Keeping
- ❑ Injury Prevention – Principles and Practice
- ❑ Field of Play and Event cover
- ❑ Sports Trauma Management
- ❑ Clinical Assessment and Examination Skills
- ❑ Introduction to Sports Injury Medical Imaging

**Recommended Reading & Required Reading**

**Required**  
 Brukner, P. & Kahn, K. (2012). *Clinical Sports Medicine (fourth edition)*. UK, McGraw-Hill.

**Recommended**  
 D. Joyce & D. Lewindon (2015) *High Performance Injury Prevention and Rehabilitation: An integration of world class sports medicine and performance science: Human Kinetics.*

Harris, P. F., Ranson, C. A. & Robertson, A. (2013). *Anatomy for Problem Solving in Sports Medicine: The Knee*. M&K Publishing

Harris, P. F. & Ranson, C. A. (2011). *Anatomy for Problem Solving in Sports Medicine: The Back*. Nottingham: M&K Publishing

Reiman, M. (2016) *Orthopedic Clinical Examination*, Human Kinetics

### JOURNALS

[British Journal of Sports Medicine](#)

[American Journal of Sports Medicine](#)

[Clinical Journal of Sports Medicine](#)

[Journal of Science and Medicine in Sport](#)

[Physical Therapy in Sport](#)

[Medicine and Science in Sport And Exercise](#)

[Clinics in Sports Medicine](#)

[Journal of Orthopaedic and Sports Physical Therapy](#)

### INTERNET

[British Association of Sport and Exercise Medicine](#)

[Association of Chartered Physiotherapists in Sports Medicine](#)

[American College of Sports Medicine](#)

[Oslo Sports Trauma Research Centre](#)

[The Shoulder Doc](#)

### **Access to Specialist Requirements**

Students will be offered support that reflects their needs and this might include tutorials; face-to-face, using skype / FaceTime and Webinar options.

Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Sport and Exercise Medicine 1	SSP7058	C900	3

Level (3 to 8)	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
7	30	15	3.0	0%	Standard Taught Module

Teaching Period	Pre-requisites
September	None

Module Leader	School(s)	Campus
Dr Mark Ridgewell	Cardiff School of Sport	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment Type	Weighting of Assessment	Approximate Date of Submission
WRIT1 – Clinical cases	2 SEM case studies (1,500 words each)	30%	18 <sup>th</sup> May 2017
WRIT2 – Essay 1	2,000 words	25%	12 <sup>th</sup> Mar 2018
PLAC1 – Logbook Part 1	25 hours placement with Viva Voce (20 mins)	15%	FT – 10 <sup>th</sup> Jan 2018 (exam Jan 2018) PT – 25 <sup>th</sup> May 2017 (exam Jun 2018)
OTHR1 – OSCE (Stations)	50 mins	30%	Jun 2018

#### Rationale for Assessment and Opportunity for Feedback

Four separate assessments, all of different types, are used to assess the module.

WRIT1 requires students to follow a structured 'journal style' format to provide detailed case studies of patients they have managed or observed within their own practice or via clinical placement. Case studies must be related to a provided list of topics/conditions covered during the Jan attendance block.

WRIT2 comprises a written submission related to a sport medicine topic covered in the module.

PLAC1 allows the breadth and depth of student development to be gauged via assessment of a written logbook of; their sport medicine experience, clinical placement, case study presentations, professional development records and plans. This is further explored in a 20min Viva Voce where the logbook and career plans are discussed with two experienced sport medicine clinicians.

OTHR1 is an 'objective, structured, clinical examination' covering practical and theoretical elements of the module within 10, 4.5-minute exam stations worth 10 marks each. A practice OSCE is provided in Jan.

### Aim(s)

This module aims to develop the students' knowledge and application of sports medicine related investigations, and skill in assessing, treating, preventing and rehabilitating exercise related injury and illness.

### Learning Outcomes

**After studying this module you should be able to:**

- ❑ Know and understand problems associated the World Anti-Doping Agency (WADA) banned list of substances and methods, to allow appropriate prescription for competitors safely within the rules set by the list and to advise competitors how to access the information concerning self-administered medications.
- ❑ Experience ultrasound scanning application for sports injury investigation and management
- ❑ Know the risks and challenges associated with sport and exercise participation in a variety of environmental conditions, including diving medicine
- ❑ Critically review the evidence for the use of injections and the risk-benefits of the various options, and assess suitability of sport injury injection therapy
- ❑ Provide appropriate and safe exercise prescription for participants with conditions such as; obesity, diabetes, cancer, cardiovascular disease and asthma
- ❑ Understand the commonest causes of sudden death whilst exercising, and critically evaluate the usefulness of pre-participation screening
- ❑ Utilise injury prevention principles to design injury risk management programmes for a variety of sports
- ❑ Understand and apply management principles for rheumatological conditions and bone stress injury in the exercising population
- ❑ Apply effective taping techniques for common injuries to shoulder, ankle, wrist and knee
- ❑ Understand and apply workload management and progression principles to manage injury risk whilst facilitating athlete performance
- ❑ Link knowledge with other aspects of the Sport and Exercise Medicine course to provide a holistic understanding of the nature of injury in order to provide the best possible management.

**Learning and Teaching Methods: Range of learning methods (including directed study) and expected scheduled contact time on each:**

Learning Method	Rationale	Type of contact (scheduled/non-contact)	Total hours
Workshops	To support and guide the students in the skills	Scheduled	10

	necessary for clinical examination		
Lecture	To provide content related knowledge and a starting point /summary of key issues from which students are motivated to explore further.	Scheduled and non-contact (recorded)	30
Guided Independent Study	To develop skills of independent enquiry and becoming an independent/autonomous learner as associated with undertaking a substantial piece of independent work.	Non-Contact	260

### Indicative Content

The content of the module is updated and revised each year but students can expect to cover topics such as

- ❑ Doping and the WADA Banned List
- ❑ Practical Ultrasound Scanning
- ❑ Environmental Medicine including Diving
- ❑ Injection Theory and Workshop
- ❑ Exercise Induced Asthma
- ❑ Exercise for Health (Obesity, Diabetes, cancer, cardiovascular)
- ❑ Exercise for Health Prescription (Workshop)
- ❑ Taping for Sports Injuries
- ❑ Rheumatological Conditions in SEM
- ❑ Injury Prevention (Workshop)
- ❑ Cardiac Screening and SCD
- ❑ Bone Health
- ❑ Workload Management and Athlete Monitoring

### Recommended Reading & Required Reading

#### Required Reading:

Brukner, P. & Kahn, K. (2012). *Clinical Sports Medicine (fourth edition)*. UK, McGraw-Hill.

#### Recommended Reading:

Motram, D (2010) *Drugs in Sport 5<sup>th</sup> Edition* Routledge: USA

Reiman, M (2016) *Orthopedic Clinical Examination*, Human Kinetics

Saunders, S. and Longman, S. (2006). *Injection Techniques in Orthopaedics and Sports Medicine with CD-ROM: A Practical Manual for Doctors and Physiotherapists* Churchill Livingstone, Elsevier

Constantinou & Brown (2013) *Therapeutic Taping for Musculoskeletal Conditions* Churchill Livingstone, Elsevier

**JOURNALS**

[British Journal of Sports Medicine](#)

[American Journal of Sports Medicine](#)

[Clinical Journal of Sports Medicine](#)

[Journal of Science and Medicine in Sport](#)

[Physical Therapy in Sport](#)

[Medicine and Science in Sport And Exercise](#)

[Clinics in Sports Medicine](#)

[Journal of Orthopaedic and Sports Physical Therapy](#)

**INTERNET**

[British Association of Sport and Exercise Medicine](#)

[Association of Chartered Physiotherapists in Sports Medicine](#)

[American College of Sports Medicine](#)

[World Anti-doping Agency](#)

[UK Sport Drug Information Database](#)

[\(http://www.uk sport.gov.uk/did\)](http://www.uk sport.gov.uk/did)

[100% ME website](#)

**Access to Specialist Requirements**

Students will be offered support that reflects their needs and this might include tutorials using skype / FaceTime and Webinar options.



Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Fundamentals of Sport and Exercise Science for health professionals	SSP7054	C600	1

Level 4-7	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
7	20	10	2.0	0	Standard Taught Module

Teaching Period	Pre-requisites
November	NA

Module Leader	School(s)	Campus
Dr Izzy Moore	CSS	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment	Weighting of Assessment	Date of Submission
WRIT1 – Essay	3,000 words	70%	January
PRES1 – Viva Voce Examination	20 minutes (~2000 words equivalency)	30%	April

Rationale for Assessment and Opportunity for Feedback
<p>WRIT1 will be a written essay requiring critical appraisal of relevant literature. This will require students to demonstrate their understanding of the role that Sport and Exercise Science has within the field of Sport and Exercise Medicine, through the use of empirical-based arguments.</p> <p>PRES1 will be a viva assessment of the students' Sport and Exercise Science knowledge. Students will undertake a short viva assessment either in person with two programme staff or through video methods (e.g. Skype). This will give students the opportunity to apply the theoretical knowledge gained from each sub-discipline and demonstrate an understanding of wider implications.</p>

Aim(s)
<p>The aim of this module is to introduce students to the fundamentals of Sport and Exercise Science: biomechanics, physiology, psychology, nutrition and strength and conditioning. It will develop the students' knowledge of these areas by applying it to: the prevention of injury, the recovery from injury and sports performance.</p>

Learning Outcomes
<p>After completing this module students should be able to:</p>

1. Critically evaluate the fundamental principles associated with the sub-disciplines of biomechanics, physiology, psychology, nutrition and strength and conditioning;
2. Identify the role Sport and Exercise Science might play within the field of Sport and Exercise Medicine, and appreciate the need for a multi-/interdisciplinary approach to athlete support;
3. Use a biomechanics perspective to understand underlying mechanisms associated with musculoskeletal injury risk and inform clinical rehabilitation
4. Demonstrate knowledge and understanding of the physiological systems that effect the response to sport and exercise
5. Understand the psychology of sports injury and how psychological interventions can help an injured athlete
6. Describe the key concepts associated with needs analysis and apply these to a range of sporting activities.
7. Understand the applied use of performance nutrition principles and strategies that impact upon athletic performance
8. Work both as an individual and a member of a coherent team to collect, analyse, interpret and implement raw (case study) data using practical (laboratory-based) skills within the disciplines of biomechanics, physiology and strength and conditioning;
9. Identify, source and critically evaluate a body of existing evidence.

**Learning and Teaching Methods: Range of learning methods (including directed study) and expected scheduled contact time on each:**

<b>Learning Method</b>	<b>Rationale</b>	<b>Type of contact (scheduled/non contact)</b>	<b>Total hours</b>
Taught lectures	To appraise the fundamentals of each sub-discipline and introduce how fundamental concepts can be applied to injury and performance in a sporting context.	Scheduled	7.5
Practical classes and workshops	To provide laboratory and applied experience in sport and exercise science data collection, processing and analysis approaches.	Scheduled	7.5
Online tasks/e-learning	Online activities and directed tasks with accompanying supportive video; To describe the fundamentals of each sport and exercise science sub-discipline.	Non contact	15
Independent study (including directed reading, guided revision)	To facilitate the development of background knowledge for scheduled lectures, and assessments; To develop experience in independently appraising research in a student's own area of interest within sport and exercise; To promote opportunities for further learning of the primary module skills and knowledge through individual study.	Non contact	170

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### Indicative Content

The topics listed below are the indicative content for this module, and will be covered on Moodle and formal teaching during the November residential course.

- An overview of Sport and Exercise Science and the role of the Sports Scientist within Sport and Exercise Medicine
- Integrated practice of multi-disciplinary SEM and SES teams
- An introduction to fundamental principles of biomechanics, physiology, psychology, nutrition, and strength and conditioning
- The application of biomechanics in the prevention of injury
- Biomechanical clinical rehabilitation
- Physiological adaptation and training
- Physiological demands of sport and performance
- Psychological intervention strategies
- The psychology of sports injury and the management of injured athletes
- Key concepts of needs analysis
- Training modalities for strength and conditioning
- Sports nutrition principles and strategies
- Nutrition, fluid replenishment and ergogenic aids

### Recommended Reading

#### Required:

Thatcher, J., Thatcher, R., Day, M., Portas, M., & Hood, S. (2009). *Sport and Exercise Science*. Learning Matters Ltd. ISBN: 9781844451876

#### Recommended:

##### Biomechanics

Hamill, J., & Knutzen, K. M. (2008). *Biomechanical Basis of Human Movement*. 3rd Edition. London: Lippincott Williams & Wilkins.

##### Psychology

Hanton, S. & Mellalieu, S.D. (2011) (Eds.), *Professional Practice in Sport Psychology: A Review*. London: Routledge

Tenenbaum, G. & Eklund, R.C. (2007). (Eds.), *Handbook of sport psychology (3rd Edition)*. Hoboken, NJ: Wiley.

##### Exercise Physiology

ACSM. (2006). *ACSM's Guidelines for Exercise Testing and Prescription*, 7<sup>th</sup> Edition. Baltimore, USA: Lippincott, Williams and Wilkins.

ACSM. (2007). *ACSM's Health-related Physical Fitness Assessment Manual*, 2<sup>nd</sup> edition. Baltimore, USA: Lippincott, Williams and Wilkins.

Ehrman, J., Gordon, P., Visich, P. & Keteyian, S. (2008). *Clinical Exercise Physiology*, 2<sup>nd</sup> edition. Champaign, IL: Human Kinetics.

McArdle, W.D. Katch, F.I. and Katch, V.L. (2009). *Exercise Physiology, Energy, Nutrition & Human Performance*, 7<sup>th</sup> edition. Philadelphia, USA: Lippincott, Williams and Wilkins.

Powers, S. & Howley, E.T. (2008). *Exercise Physiology: Theory and Application to Fitness and Performance*, 7<sup>th</sup> edition. Maidenhead: McGraw-Hill Higher Education.

### **Nutrition**

Burke, L. & Deakin, V (2010) *Clinical Sports Nutrition*, 4<sup>th</sup> Edition. McGraw-Hill Medical.

Jeukendrup, A. (2010). *Sports Nutrition*, 2<sup>nd</sup> edition. Leeds: Human Kinetics.

### **Strength and Conditioning**

Cardinale, M., Newton, R. and Nosaka, K. (2011) *Strength and conditioning: Biological principles and practical applications*. Chichester, UK Wiley-Blackwell.

### **Journals**

Medicine and Science in Sports and Exercise

Sports Medicine

Journal of Applied Biomechanics

Sports Biomechanics

Journal of Applied Physiology

European Journal of Applied Physiology

Journal of Science and Medicine in Sport

Journal of Applied Sport Psychology

Journal of Sport and Exercise Psychology

Journal of Strength and Conditioning Research

### **Internet**

Sports Dietitians UK [www.sportsdietitians.org.uk](http://www.sportsdietitians.org.uk)

BDA website [www.bda.uk.com](http://www.bda.uk.com)

### **Access to Specialist Requirements**

Biomechanics laboratory, associated equipment and software

Physiology laboratory, associated equipment and software

SCRAM gym and sports facilities

Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Sport and Exercise Medicine II	SSP7055	C900	1

Level 4-7	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
7	20	10	Full	0	Compulsory

Teaching Period	Pre-requisites
April	NA

Module Leader	School(s)	Campus
Dr Mark Ridgewell	CSS	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment Type	Weighting of Assessment	Date of Submission
PRES1		10%	May
CRITIQUE		40%	June
RESEARCH PROPOSAL		50%	

Aim(s)
The aim of this module is to develop understanding and improve awareness of the risks and benefits of exercise in chronic diseases and special groups (the elderly, children and the disabled). Knowledge of sports specific injuries and more advanced radiological interpretation will be developed.

Learning Outcomes
<p><b>On completion of the module a student should be able to:</b></p> <ul style="list-style-type: none"> <li>□ Acknowledge the risks of under activity and the benefits of exercise to the population as a whole and to advise and prescribe, if necessary, appropriate exercise to special groups and sufferers of common chronic diseases, with awareness of the relative risks and benefits.</li> <li>□ Assess and critically discuss treatment options for chronic fatigue/unexplained underperformance syndrome.</li> <li>□ Manage the risks of infection in sport and of working with, and travelling abroad with, sports teams.</li> </ul>

- ❑ Appreciate and discuss some of the legal and ethical issues commonly seen in Sport and Exercise Medicine.
- ❑ Demonstrate an awareness of the neuropsychology and importance of adequate assessment of head injuries.
- ❑ Apply knowledge and understanding of the nature of working with disabled athletes

### **Learning and Teaching Delivery Methods**

This module is delivered via a range of lectures, workshops and practical demonstrations. It is delivered during residential courses and is supported via material provided on Blackboard

### **Indicative Content**

The topics listed below are the indicative content for this module, and will be covered predominantly during the April residential course. Whilst the majority of sessions will be provided in a formal teaching situation supported by practical sessions, some topics may be covered using Blackboard only.

- ❑ Exercise and Chronic Disease / Cancer / Elderly
- ❑ Exercise in Special Populations
- ❑ Exercise and Osteoporosis
- ❑ Sport and the Disabled
- ❑ Legal and Ethical Issues
- ❑ Skin Diseases and Infection in Sport
- ❑ Unexplained Underperformance Syndrome
- ❑ Travelling in Sport
- ❑ Neurophysiology and Dry Needling
- ❑ Sport-specific injuries
- ❑ Radiology and Imaging in Sports Medicine II
- ❑ Advanced Taping / Injections / Pharmacology / Exercise Therapy

### **Recommended Reading & Required Reading**

#### **Required**

*Bruckner and Khan's Clinical Sports Medicine (fourth edition)*. UK, McGraw-Hill. 2012

#### **Recommended Additional Reading**

##### JOURNALS

British Journal of Sports Medicine ([www.bjism.bmjournals.com](http://www.bjism.bmjournals.com))

Sportex ([www.sportex-medicine.com](http://www.sportex-medicine.com))

Sports Medicine

ACSM Journals ([www.acsm.org](http://www.acsm.org))

- Medicine & Science in Sports & Exercise
- Exercise and Sport Sciences Reviews
- Current Sports Medicine Reports
- ACSM's Health & Fitness Journal

##### INTERNET

Exercise is Medicine ([www.exerciseismedicine.org](http://www.exerciseismedicine.org))  
 UK Association of Doctors In Sport ([www.ukadis.org](http://www.ukadis.org))  
 British Association of Sport and Exercise Medicine ([www.basem.co.uk](http://www.basem.co.uk))  
 Oslo Sports Trauma Research Centre (<http://www.ostrc.no/congress2005/>)  
 Australian Sports Injury website (<http://www.injuryupdate.com.au/>)

#### Access to Specialist Requirements

N/A

Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Research Methods in Sport and Exercise Medicine	SSP7056	C900	1

Level 4-7	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
7	20	10	2.0	0	Standard Taught Module

Teaching Period	Pre-requisites
November and April	NA

Module Leader	School(s)	Campus
Dr Izzy Moore	CSS	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment Type	Weighting of Assessment	Approximate Date of Submission
WRIT1 – Essay (Literature review)	2000 words	40%	February
PRES1 – Presentation (oral presentation)	15 min (~1500 words equivalency)	30%	April
WRIT 2 – Essay (Study Design)	1500 words	30%	May

#### Rationale for Assessment and Opportunity for Feedback

WRIT 1 will provide students with the opportunity to demonstrate critical writing skills and the application of the knowledge gained throughout the module when considering their chosen research area and question. Making contact with a supervisor forms part of the completion of this assessment.

WRIT 2 will provide students with the opportunity to demonstrate the application of the knowledge gained throughout the module when considering their chosen research design. This will require

students to justify their chosen design and consider the ethical implications of undertaking the research, as an ethics application forms a completion requirement of this assessment.

PRES1 will provide students with the opportunity to demonstrate an understanding of their chosen research area, an ability to synthesise and critique relevant literature and form a research question. This will require students to clearly articulate their thoughts, a necessary skill when presenting as well as providing a powerpoint presentation that clearly supports communication of these thoughts. Students will be required to engage with potential supervisor/s prior to the completion of this task.

### **Aim(s)**

The aim of the module is to provide students with the insight to make informed decisions and to design and plan a piece of independent research. The focus is for students to gain an advanced understanding and appreciation of the research process as an evolving phenomenon from a quantitative approach.

### **Learning Outcomes**

**After studying this module you should be able to:**

- Identify the core assumptions, practices and limitations of particular approaches;
- Critique and conduct appropriate forms of analysis and representation congruent with your approach;
- Conduct research design and planning based upon a critical review in a chosen area;
- Demonstrate an awareness of ethical issues in research;
- Write in an academic, scientific manner
- Develop and structure a research proposal
- Deliver a literature critique and research question effectively to an academic audience via visual and oral communication;
- Respond to questions about your critique and research question with confidence and give informed answers.

### **Learning and Teaching Methods: Range of learning methods (including directed study) and expected scheduled contact time on each:**

<b>Learning Method</b>	<b>Rationale</b>	<b>Type of contact (scheduled/non contact)</b>	<b>Total hours</b>
Taught lectures	To introduce the research process; To critique research designs and approaches.	Scheduled	10
Online tasks/e-learning	Online activities and directed tasks with accompanying supportive video	Scheduled	30
Independent study (directed reading and research)	To develop independent study skills	Non contact	160



## Indicative Content

The topics listed below are the indicative content for this module, and will be covered on Moodle and formal teaching during the November residential course.

- Writing in research
- Critiquing literature
- Generating and justifying a research question
- Method construction
- Epidemiology analysis
- Developing a research proposal
- Ethical issues in research

## Recommended Reading

### Required Reading:

Jones, I. (2015). *Research methods for sports studies*, 3<sup>rd</sup> ed. London: Routledge [\[E-book available\]](#)

### Recommended Reading:

Field, A. & Hole, G.J. (2003). *How to design and report experiments*. London: Sage.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. 4th Edition. London: Sage.

McNamee, M. J, Olivier, S. and Wainwright, P. (2007) *Research Ethics in Exercise, Health and Sport Sciences*. London: Routledge. [\[E-book available\]](#)

Neil, R., Hanton, S.M., Fleming, J.S. and Wilson, K. (eds.), (2014). *The research process in sport, exercise and health: case studies of active researchers*. London: Routledge. [\[E-book available\]](#)

## Access to Specialist Requirements

Access to Learning Resource Centre and Moodle  
Access to Essay and Writing Support Officer  
Careers Service  
Access to IT suite for SPSS sessions

Module Title	Module Number	JACS Subject Code(s) and % of each subject	ASC Category(ies)
Dissertation Project in Sport and Exercise Medicine	SSP7059	C600	3

Level (3 to 8)	Credits	ECTS Credit	Module Value	% Taught in Welsh	Module Type
Level 7	60	30	6.0	0%	Standard taught module

Teaching Period	Pre-requisites
Block 1, 2, 3	NA

Module Leader	School(s)	Campus
Dr Izzy Moore	Cardiff School of Sport	Cyncoed

Assessment Methods			
Assessment Type	Duration/Length of Assessment Type	Weighting of Assessment	Approximate Date of Submission
WRIT1 – Dissertation Coursework	12000 words (equivalence)	80%	March/May
PRES1 – Presentation viva voce	18-30 mins	20%	April

#### Rationale for Assessment and Opportunity for Feedback

Journal Paper format representation of the work will be orientated towards:

- Students will be required to submit their dissertation project in accordance with the submission guidelines of an internationally recognised peer review publication within their field of study (i.e., it is consistent with the publication guidelines of that specific journal);
- Students are required to append the submission guidelines of the journal the work could be submitted to with their submission. The submission guidelines will be used as the assessment criteria for aspects related to formatting and adherence to scientific writing principles (e.g., referencing procedures);
- In consultation with their Supervisor, and to facilitate the assessment process students will be required to submit within an appendix material that might be central to the assessment of the quality and rigour of the project, but consistent with published papers should not be included in the main body of the text (e.g., interview guides, data screening).

As the focus of the module expects students to work independently it is important that it also reflects the diverse nature of students studying across the module. The use of journal paper format allows the module to capture a range of disciplines within Sport and Exercise Medicine.

The underlying scholarly requirements for this module are premised on undertaking SSP7056. Indicative content on the module and a portion of the assessment for SSP7056 (e.g., WRIT2) assist students with preparing for the Dissertation Project module (around areas of planning, proposing a line of research, critical writing skills, potential methods, potential analysis and representation approaches and research ethics).

Students will have the option of receiving formative feedback on each section of their submission as determined by the format adopted. Additionally, a named dissertation project supervisor will support the student throughout the completion of the module. Students will be allocated to a tutor following completion of SSP7056 WRIT2.

The second assessment method for the module will be in the form of a viva assessment. Students will undertake a short viva assessment either in person with a panel of programme staff or through video methods (e.g. Skype).

WRIT\_1 (Dissertation Coursework) is a non-compensatable element (i.e., students' must obtain a pass mark or greater within the WRIT\_1 element).

### Aim(s)

The aim of this module is to provide the student with the opportunity to work independently in an area of specific interest related to their programme of study. Aligned and in a progression to the aims of SSP7056, the Dissertation Project module enables a students to select, rationalise, conduct and appropriately present and represent a supervised research project in an academic style.

### Learning Outcomes

**After studying this module you should be able to:**

- Plan and carry out an original, sustained piece of academic work in a systematic fashion adhering to ethical principles within research;
- Appropriately handle, manage and interpret the findings of the project;
- Demonstrate critical thinking and reflective skills;
- Interact with, and alongside, an appointed supervisor.

### Learning and Teaching Methods: Range of learning methods (including directed study) and expected scheduled contact time on each:

Learning Method	Rationale	Type of contact (scheduled/non-contact)	Total hours
Project (tutor) supervision.	To support and guide the students independent study.	Scheduled	30
Guided Independent Study	To develop skills of independent enquiry and becoming an independent/autonomous learner as associated with undertaking a substantial piece of independent work.	Non-contact	570

## Indicative Content

The indicative content of the module is bespoke to the students' needs related to their specific dissertation project.

## Recommended Reading & Required Reading

### Required Reading:

Biggam, J. (2014). *Succeeding with your master's dissertation: A step by step handbook*, 3<sup>rd</sup> ed. Maidenhead: Open University Press.

Hart, C. (2005). *Doing your masters dissertation*. London: Sage.

### Recommended Reading:

Armour, K., & Macdonald, D. (2012). *Research methods in physical education and youth sport*. Abingdon, Oxford: Routledge. [\[E-book available\]](#)

Berg, K. E., & Latin, R. W. (2008). *Essentials of research methods in health, physical education, exercise science, and recreation*, 3<sup>rd</sup> ed. Baltimore, MD, USA: Lippincott, Williams, & Wilkins.

Field, A. (2013). *Discovering statistics: Using SPSS for windows*, 4<sup>th</sup> ed. London: Sage.

Field, A., & Hole, G.J. (2002). *How to design and report experiments*. London: Sage.

Jones, I. (2015). *Research methods for sports studies*, 3<sup>rd</sup> ed. London: Routledge. [\[E-book available\]](#)

McNamee, M. J., Olivier, S., & Wainwright, P. (2007). *Research ethics in exercise, health and sport sciences*. London: Routledge. [\[E-book available\]](#)

Neil, R., Hanton, S., Fleming, S., & Wilson, K. (Eds.) (2013). *The research process in sport, exercise and health: case studies of active researchers*. London: Routledge.

O'Donoghue, P.G. (2012). *Statistics for sport and exercise studies*. London: Routledge. [\[E-book available\]](#)

Patton, M. Q. (2013). *Qualitative research and evaluation methods*, 4<sup>th</sup> ed. Los Angeles, USA: Sage.

Thomas, J., Nelson J., & Silverman (Eds.) (2011). *Research methods in physical activity*, 6<sup>th</sup> ed. Champaign, IL, USA: Human Kinetics.

### Journals:

Journals related to areas of subject specialism

## Access to Specialist Requirements

As required by the nature of students' individual project.