Department Mission

‘To achieve recognised excellence in the provision of undergraduate and postgraduate education, research and consultancy in the Applied Sport and Exercise Sciences, Sports Coaching Science and Sports Therapy’

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The department

Our department of Sport and Exercise Sciences has been delivering sport science programmes since 1982 and has a proven track record of excellence in teaching, research and applied sport and exercise science.

Our staff delivering the programmes have diverse research and consultancy interests and this, combined with very well equipped laboratory spaces, provide you with the opportunity to pursue your own research interests in sport and exercise sciences and sports therapy.

The combination of our research, teaching and applied sport and exercise science and sports therapy enable us to maintain very high standards and remain one of the top UK sports science universities. You will really value the vibrant and hands-on learning environment we create and the opportunities for independent research that we offer.

This brochure provides information about our undergraduate courses and our staff. Please also browse our web pages (www.chi.ac.uk/sport) where you will find links to further information.

If you have any questions or comments, then please contact us via our admissions office or the addresses you find in our staff pages.

Dr Mike Lauder
Head of Department
Ben Quilter, World Judo Champion.
What makes us different?

The University of Chichester offers two of the few BASES endorsed programmes in the UK. We also offer an accredited BPS programme in sport and exercise psychology and our sports therapy degree is endorsed by The Society of Sports Therapists.

Sport and exercise is perhaps the one area of sport that has expanded most rapidly over the last decade with the introduction of government funding for Sport Science Support Services on the one hand, and public health and well-being on the other.

The University has a well-established Olympic heritage dating back to the 1988 Seoul Games, and continues to be involved in the training and preparation of Olympic athletes.

Some of our recent successes have included:
• Ben Ainslie – Sailing 4th Olympic Gold
• Luke Patience and Stuart Bithell – Sailing
• Ian Percy and Andrew Simpson – Sailing
• Hannah Mills and Saskia Clark – Sailing
• Nick Dempsey – Windsurfing
• Amir Khan – Boxing
• Pete Waterfield/Leon Taylor – Diving
This course aims to develop effective coaches through the application of sport and exercise science. The course will develop educated coaches, offering practical skills with a theoretical underpinning in the fields of Biomechanics, Psychology, Physiology and Skill Acquisition.

The course is delivered by highly qualified coaches who have worked at the highest level, and who are coach educators with governing bodies of Sport. Chichester offers one of only a few BASES-endorsed programmes in the UK. Over the last decade the vocational opportunities for coaches have grown immensely. Athletes at all levels look to their coach for advice, guidance and support, thus placing huge demands on their knowledge and skills. You will develop an understanding of the underlying principles controlling performance and learning. The analysis of coaching practice also forms an important part of the degree, where traditional and non-traditional methods are critically examined. You will be expected to take part in practical coaching sessions, culminating in a work placement in year three. With experience of delivering sport science support to Olympic medal winners, Chichester is well placed to provide a significant contribution to athlete services for the 2016 Olympic Games.

92% Student Satisfaction

The National Student Survey is an independent market research survey carried out by Ipsos MORI. Final year students are asked about their experience of the course. Our undergraduate sports courses delivered in the department of Sport and Exercise Sciences achieved an average student satisfaction rating of 92% in the 2012 Survey.
Year One Module Information

Scientific Inquiry into Sport and Exercise Double Module

Aims:
The module aims to provide students with a foundation in study and research skills which will support and underpin work in other sports science modules.

Indicative Curriculum Content:
The module will be split into four blocks which will use a particular sporting context to develop study and research skills through practical application. In addition students will be introduced to simple methods of qualitative and quantitative research and data analysis together with the philosophies that underpin them.

Introduction to Sport and Exercise Psychology

Aims:
Sport and exercise contexts provide a fascinating and complex opportunity to investigate elements of the psychology of human behaviour. The impact of social psychological factors on the participation in and performance of sport and exercise behaviour is critical for both coaches and performers to understand. Theoretical perspectives and research findings from a number of current areas within the field will provide students with guidance on how behaviour can be shaped in both sporting and physical activity settings.

Indicative Curriculum Content:
The module content will include material selected from the following: introduction to key concepts in the psychology of sport and exercise situations including motivation for achievement and participation; individual difference characteristics of elite performers; group cohesion and leadership.

Anatomy and Kinesiology

Aims:
This module aims to introduce students to the basic anatomical and physiological components and biomechanical principles underpinning the practical analysis of human movement. It will also consider the role of analysis in sport and in movement education. It will serve to widen the students’ knowledge base and show the integrative nature of the separate disciplines of physiology and biomechanics; it will also provide a firm basis for work at a higher level in the discipline of biomechanics.

Indicative Curriculum Content:
The module content will include: definitions of human movement terms; form and nomenclature for skeletal muscle; classification of bones, joints and muscles; positions and actions of major skeletal muscles; concentric/eccentric action and electromyography; histological description of osseous tissue; growth, repair and mechanical properties of bone; the specialised structure and function of tendons and ligaments; the concept of centre of mass; levers; anthropometry; flexibility and the kinesiological analysis of sports movements.
Dr Mark Willems  
**Professor in Exercise Physiology**

Mark’s work is considered innovative by his peers across the world. He is an Applied Exercise Physiologist whose research work for many years has focused on the physiology of skeletal muscle with a particular interest in exercise-induced injury and fatigue. He has had 42 articles published in scientific journals and has collaborated with Dr Siu Huang of Harvard Medical School. Mark was awarded the 2008 Aban Izett Special Award for best presentation at the 10th International Sport Sciences Congress in Turkey, for his work on the physiology of interactive video games.
Physiology of the Exercising Human Double module

Aims:
This module aims to develop an understanding of the structures and functions of the main physiological systems of humans within the context of sport and exercise. Aspects of metabolism and integrated control will also be developed to allow an initial grounding in factors underpinning energetics.

Indicative Curriculum Content:
The module will examine the structures and functions of the skeletal, neuromuscular, respiratory, cardiovascular, endocrine, digestive and thermoregulatory systems with a strong focus on their direct or indirect influence on the processes of energy metabolism. In covering these topics, a focus on integrated control will be maintained. Work will be placed within the context of the exercising human across the breadth of the energy spectrum.

Introduction to Sport Biomechanics

Aims:
This module aims to introduce the basic concepts of biomechanics as they relate to human movement and performance in sport and exercise. Students are shown how the basic physical principles underpin performance in sport, and how such principles can be practically investigated. Practical work considers the general principles of biomechanics related experimental methodology, data analysis, and statistical analysis for practical investigations into the evaluation of sport and exercise.

Indicative Curriculum Content:
The module content will include physical concepts such as: Newton's laws of motion; force; mass; gravity; ground reaction force; friction; torques; moments; momentum; coefficient of restitution; equations of motion; linear and angular displacement; velocity and acceleration; centripetal force; angular momentum and inertia. Kinetic energy, potential energy, work power. Muscle kinetics/energetics. Projectile motion. Magnus effect, spin, lift and drag. Biomechanical kinetic and kinematic measurement methods and tools used for assessment/analysis in sport and exercise.

Acquisition and Performance of Sports Skills

Aims:
The study of coaching in sport and exercise related sciences requires at least, a rudimentary understanding of the psychological principles underlying skill acquisition and performance. This module sets out to provide the students with that basic knowledge. The knowledge may be an end in itself, but also forms the basis of further study in this area.

Indicative Curriculum Content:
The first part of the module examines the psychological factors involved in performance: sensation, perception, reaction time, decision making, anticipation and efferent organisation. The second part examines factors affecting skill acquisition: memory, feedback and practice. Throughout the module, the relative strengths and weaknesses of Information Processing Theory and Ecological Psychology Theories are discussed.
Year Two Module Information

**Researching Sport and Exercise**

**Aims:**
The module builds on experience gained at level one. It aims to enable students to complete a research proposal and to conduct a small scale research project within the area of Sports Science.

**Indicative Curriculum Content:**
Students’ experience with statistics will be expanded to support the analyses required in other component modules of each of the degree programmes to which this module contributes. It will explore the theories underpinning research and will address ethical issues relating to such work. Students will be encouraged to formulate a research project and construct a research proposal. Through a small scale project students will gain experience of conducting research within an area of personal interest. The final part of the module will focus on the development of a proposal for an independent project to be conducted at level three.

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**Developing and Monitoring Fitness in the Coaching Process**

**Aims:**
In most cases, successful sporting performance is dependent on the physical development of participants to meet the demands of the event. The aim of the module is to provide students with grounding in the knowledge of planning physical fitness tests and programmes, and developing multi-directional fitness activities that are available to the coach.

**Indicative Curriculum Content:**
This module will examine physiological factors associated with the development and monitoring of fitness in competitive athletes. Topics covered will include: definitions of fitness, periodised training, principles of physiological testing, common field tests and designing strength and conditioning programmes.

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**Analysis of Coaching Practice Double Module**

**Aims:**
The study of coaching science requires the student to put theory into practice, using multi and inter-disciplinary approaches. This module sets out to (a) examine how this can be done and (b) critique the way it is done at present.

**Indicative Curriculum Content:**
The module covers the following topics, from single, multi and/or inter-disciplinary perspectives: the coaching process, training, practice, pre-performance preparation, intervention during performance and post performance evaluation.
**Cognitive Psychology for Sports Performance**

**Aims:**
One of the basic aims of coaching is to develop skill, therefore this module critically examines the strengths and weaknesses of theories concerning the acquisition of skill. Particular attention is placed on the ecological validity of such theories.

**Indicative Curriculum Content:**
The module covers the following topics, from Information Processing and Ecological Psychology perspectives: pre-instructional factors, observation and feedback, coaching styles, practice, transfer of training, declarative and procedural knowledge, motivation and learning, and arousal and learning. The module will focus on the critical application of theory and research in these areas to practice in coaching and sport science.

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**Biomechanics and Performance Analysis in Sport and Exercise**

**Aims:**
This module aims to extend the students’ knowledge and practical skills in the application of biomechanics to specific sport and exercise activities. The emphasis will be on the application of biomechanics in the assessment, evaluation and improvement of technique in a range of sports. Students will be introduced to notational analysis and its place in the scientific support of individuals and teams. In addition, the relationship between the biomechanist, performance analyst and coach will be explored. Practical experiences will include the role of biomechanical kinetic and kinematic assessment in the analysis of sport and the application of hand and computerised notation systems to individual and team sports.

**Indicative Curriculum Content:**
The biomechanics principles underpinning performance in a range of sports will be considered in relation to practical performance of sport. The module content will include analysis methodologies and research, which has enhanced biomechanics knowledge of sports performance. The biomechanics analysis and evaluation of selected sport and exercise activities will be considered e.g. golf, football, tennis, high jump, long jump, javelin, discus, gymnastics, cycling, swimming and hand and computerised notational analysis techniques.
**Psychology of Training and Competition**

**Aims:**
One of the fundamental concerns of sports psychologists and coaches is enabling an athlete to perform to their potential when training and competing. In order to do this, sport scientists and coaches must understand the psychological pressures that are inherent in training and competition and the potential consequences of these pressures. This module will seek to develop the students’ understanding of the psychological demands of training and performance and seek to explore ways in which these demands can be managed, regulated and controlled.

**Indicative Curriculum Content:**
The module will examine psychological factors that contribute to sports performance. This will include theories and approaches to stress and appraisal. Explanations for choking will be considered which will include the role of self-consciousness. This module will also examine research on coping and emotions caused by stress, including theories of anxiety. Finally, attributions following performance success and failure will be examined.

**Free Choice**
A Free Choice module can be chosen from across the Sports Science Programme in Semester two.

**Year Three Module Information**

**Independent Project**

**Aims:**
The independent project provides an opportunity to apply the appropriate knowledge, concepts, techniques and research methods of Sport and Exercise Sciences to an in-depth study of a particular question or problem related to sport, exercise or sports therapy. This module aims to foster a greater understanding of the processes used to undertake a small scale research project, and marks the culmination of the students’ learning experience. The study will enable you to produce a written research report.

**Indicative Curriculum Content:**
Students are encouraged to adopt a problem-oriented approach, you will identify a problem in sport, exercise or sports therapy which is of interest and relevance to their degree studies. An appropriate approach to addressing the problem is then determined through discussion with tutors who have relevant theoretical and practical expertise. The investigation may be based within a single discipline, or it may involve more than one discipline, but it must be based within your chosen degree programme. In all cases, tutors will advise on the capability of the student to complete the complexity of the study in the time available and with the necessary resources.
**Issues in Sports Coaching Science**

**Aims:**
Both nationally and internationally, research and practice in coaching science is rapidly developing. This module aims to develop your critical awareness of key contemporary issues that the coaching profession is facing. The module also aims to examine the implications of these issues on coaching practice. Current theory and research in sports science disciplines will be drawn upon throughout the module to provide you with an understanding of how coaching can draw from these disciplines.

**Indicative Curriculum Content:**
Content will alter as different issues are identified. At the time of writing, the most likely areas of content are: ethics, working with disabled performers, lifestyle management, drugs, supplementation and gene doping, burnout in coaches, gender issues, child protection, talent identification and talent transfer, coach mentoring and the Long Term Athlete Development Programme.

**Sports Coaching Science Work Placement**

**Aims:**
This module will offer you the opportunity to complete a unit of directed study incorporating a work placement of 105 hours (33 hours actual coaching) in a sports coaching environment. This placement can take place in a club, school or college, or any coaching environment, which is relevant to your needs and career aspirations.

**Indicative Curriculum Content:**
You will be expected to undertake a placement of 105 hours (33 hours actual coaching) the remaining 72 hours will include planning, preparation and evaluation. You will produce a proposal for the work placement which will be agreed by the tutor and host organisation. The curriculum content of the module will be driven by the learning contract, and can contain any aspect of the coaching process and components associated with sports coaching. The placement supervisor must see a copy of your Criminal Record Bureau check, which must be conducted through the University if you intend working with children.

**Training Strategies for Sport Performance**

**Aims:**
An understanding of training principles is essential when examining participation and performance in sport and exercise. This module aims to develop knowledge of the nature of physiological adaptation in response to exercise training, whilst addressing the concepts of overload, specificity, progression and reversibility. Athletic training will be discussed within theoretical and practical contexts.

**Indicative Curriculum Content:**
This module examines training principles and adaptations across the exercise mode and intensity spectrum. Topics covered will include: physiological adaptation to aerobic, anaerobic, strength and power training; flexibility training; the overload principle (frequency, intensity and duration); periodisation of training; overtraining and tapering for performance.
**Group Dynamics**

**Aims:**
Due to the pervasive nature of groups within all areas of human endeavour (work, education and sport) and the potential impacts that groups can have on an individual’s performance, life satisfaction and psychological well-being it is important for psychologists, coaches, teachers and sport scientists to have an understanding of group dynamics. The aims of this module are therefore to examine and evaluate current knowledge of group productivity and functioning and to evaluate current practice in team-building programmes.

**Indicative Curriculum Content:**
The module will examine those factors that contribute to group productivity and functioning. These will include the abilities of team members, the impact of the group environment, group organisation and leadership, team cohesion, communication, team confidence. The module will also examine the effectiveness of team-building techniques and programmes.

**Elective Modules**
The following Electives can be chosen for Year three of the Sports Coaching Science Programme:

- Biomechanical Techniques
- Applied Sports Psychology
- Nutritional Strategies for Sport

A free choice module can be chosen from across the Sports Science Programme in Year three during Semester two.
Our British Association of Sport and Exercise Sciences (BASES) endorsed Sport and Exercise Science programme is built on strong foundations as we were one of the first institutions in the UK to develop a sports related degree programme. The current programme allows for specialisation in either Sport Performance or Physical Activity for Health.

The courses at Chichester are taught by well-qualified staff and further enhanced by a strong research and consultancy profile with many staff having achieved professional accreditation from BASES.

Sport and exercise is perhaps the one area of sport that has expanded most rapidly over the last decade with the introduction of government funding for sport science support services on the one hand and public health and well-being on the other. The establishment of UK Sport and National/Regional Centres of Excellence and the Department of Health's National Support Teams means that there is a growing demand for well-qualified sport and exercise scientists. The legacy of the 2012 Olympic Games has focussed UK Sport as a world leader; and with experience of delivering sport science support to Olympic medallists, we are well placed to provide a significant contribution to athlete services at this exciting time.

92%

Student Satisfaction

The National Student Survey is an independent market research survey carried out by Ipsos MORI. Final year students are asked about their experience of the course. Our Undergraduate Sports courses delivered in the Department of Sport and Exercise Sciences achieved an average student satisfaction rating of 92% in the 2012 Survey.
Supporting Team GB

The University has played a strong supporting role in the recent success of the British Sailing Team, preparing sailors for the physical challenges of competition.

The British Sailing Team has topped the sailing medals table in three out of four of the last Olympics Games, and with the continuing support provided by us, they are widely tipped to repeat this success in Rio 2016. All of the squad come to our Bishop Otter Campus for regular fitness assessments and general sport science support as part of their programme, taking advantage of our world-class facilities.

As an Official Supplier to the British Sailing Team, we also provide physiology services to the future gold medallists who are currently part of the pathways squads, made up of junior, youth and Olympic development and transitional sailors.

A postgraduate student is employed as part of the Sports Science and Medicine team at the Royal Yachting Association to deliver and develop sports science support to the future of British competitive sailing. The student is also working towards a PhD by investigating the training loads associated with Olympic class sailing in a programme, supervised by our academics.

The official partnership will see us supporting sailors preparing for the 2016 Olympic Games in Rio de Janeiro, which will mark 20 years since the relationship between the University and the British Sailing Team produced its first Olympic success.
Three blondes in a boat. Every medal winner for sailing in the last four Olympic Games has undertaken part of their training at the University of Chichester and we continue to prepare sailors for 2016. This work is funded by the Royal Yachting Association.
Year One Module Information

Scientific Inquiry into Sport and Exercise

Aims:
The module aims to provide you with a foundation in study and research skills which will support and underpin work in other sport science modules.

Indicative Curriculum Content:
The module will be split into four blocks which will use a particular sporting context to develop study and research skills through practical application. In addition you will be introduced to simple methods of qualitative and quantitative research and data analysis together with the philosophies that underpin them.

Anatomy and Kinesiology

Aims:
This module aims to introduce you to the basic anatomical and physiological components and biomechanical principles underpinning the practical analysis of human movement. It will also consider the role of analysis in sport and in movement education. It will serve to widen your knowledge base and show the integrative nature of the separate disciplines of physiology and biomechanics; it will also provide a firm basis for work at a higher level in the discipline of biomechanics.

Indicative Curriculum Content:
The module content will include: definitions of human movement terms; form and nomenclature for skeletal muscle; positions and actions of major skeletal muscles; concentric / eccentric action and electromyography; histological description of osseous tissue, growth, repair and mechanical properties of bone; the specialised structure and function of tendons and ligaments; the concept of centre of mass; levers; anthropometry; flexibility, and the kinesiological analysis of sports movements.

Introduction to Sports Biomechanics

Aims:
This module aims to introduce the basic concepts of biomechanics as they relate to human movement and performance in sport and exercise. You will be shown how the basic physical principles underpin performance in sport, and how such principles can be practically investigated. Practical work considers the general principles of biomechanics related experimental methodology, data analysis and statistical analysis for practical investigations into the evaluation of sport and exercise.

Indicative Curriculum Content:
The module content will include physical concepts such as: Newton’s laws of motion; force; mass; gravity; ground reaction force; friction; torques; moments; momentum; coefficient of restitution; equations of motion; linear and angular displacement; velocity and acceleration; centripetal force; angular momentum; and inertia. Kinetic energy, potential energy, work and power: Muscle kinetics/energetics. Projectile motion. Magnus effect, spin lift and drag. Biomechanical kinetic and kinematic measurement methods and tools used for assessment/analysis in sport and exercise.
Introduction to Sport and Exercise Psychology

Aims:
Sport and exercise contexts provide a fascinating and complex opportunity to investigate the elements of the psychology of human behaviour. The impact of social psychological factors on the participation in and performance of sport and exercise behaviour is critical for both coaches and performers to understand. Theoretical perspectives and research findings from a number of current areas within the field will provide students with guidance on how behaviour can be shaped in both sporting and physical activity settings.

Indicative Curriculum Content:
The module content will include material selected from the following: introduction to key concepts in psychology of sport and exercise situations including motivation for achievement and participation, individual difference characteristics of elite performers, group cohesion and leadership.

Acquisition and Performance of Sports Skills

Aims:
The study of coaching in sport and exercise related sciences requires at least a rudimentary understanding of the psychological principles underlying skill acquisition and performance. This module sets out to provide you with that basic knowledge. The knowledge may be an end in itself, but also forms the basis of further study in this area.

Indicative Curriculum Content:
The first part of the module examines the psychological factors involved in performance: sensation, perception, reaction time, decision making, anticipation and efferent organisation. The second part examines factors affecting skill acquisition: memory, feedback and practice. Throughout the module, the relative strength and weaknesses of Information Processing Theory and Ecological Psychology Theories are discussed.

Physiology of the Exercising Human Double module

Aims:
This module aims to develop an understanding of the structures and functions of the main physiological systems of humans within the context of sport and exercise. Aspects of metabolism and integrated control will also be developed to allow an initial grounding in factors underpinning energetics.

Indicative Curriculum Content:
The module will examine the structures and functions of the skeletal, neuromuscular, respiratory, cardiovascular, endocrine, digestive and thermoregulatory systems with a strong focus on their direct or indirect influence on the processes of energy metabolism. In covering these topics, a focus on integrated control will be maintained. Work will be placed within the context of the exercising human across the breadth of the energy spectrum.
Year Two Module Information

Sport Performance (SP) and/or Physical Activity for Health (PAH) routes

Researching Sport and Exercise (SP)/(PAH)

Aims:
The module builds on the experience gained at level one. It aims to enable you to complete a research proposal and to conduct a small scale research project within the area of Sport and Exercise Sciences.

Indicative Curriculum Content:
Your experience with statistics will be expanded to support the analyses required in other component modules of each of the degree programmes to which this module contributes. It will explore the theories underpinning research and will address ethical issues relating to such work. You will be encouraged to formulate a research project and construct a research proposal. Through a small scale project, students will gain experience of conducting research within an area of personal interest. The final part of the module will focus on the development of a proposal for an independent project to be conducted at level three.

Biomechanics and Performance Analysis in Sport and Exercise (SP)/(PAH)

Aims:
This module aims to extend your knowledge and practical skills in the application of biomechanics to specific sport and exercise activities. The emphasis will be on the application of biomechanics in the assessment, evaluation and improvement of technique in a range of sports. You will be introduced to notational analysis and its place in the scientific support of individuals and teams. In addition, the relationship between the biomechanist, performance analyst and coach will be explored. Practical experiences will include the role of biomechanical kinetic and kinematic assessment in the analysis of sport and the application of hand and computerised notation systems to individual and team sports.

Indicative Curriculum Content:
The biomechanics principles underpinning performance in a range of sports will be considered in relation to practical performance of sport. The module content will include analysis methodologies and research, which has enhanced biomechanics knowledge of sports performance. The biomechanics analysis and evaluation of selected sport and exercise activities will be considered e.g. golf, football, tennis, high jump, long jump, javelin, discus, gymnastics, cycling, swimming and hand and computerised notational analysis techniques.
Sports Injury and Prevention (SP) / (PAH)

Aims:
This module aims to develop an awareness of potential injury situations and predisposing factors to injury in sport. Familiarity with types of sport injury and treatment procedures should aid in the prevention and effective treatment of injury in the workplace.

Indicative Curriculum Content:
Basic musculo-skeletal anatomy revision including features particularly prone to injury in sport e.g. ligaments; incidence of sport injury; common injuries to the body and methods of occurrence; first aid procedures and injury assessment; predisposing factors to injury; psychology of injury; prevention of injury and protective measures; role of biomechanics assessment in injury prevention/treatment; treatment methods e.g. massage; theory behind rehabilitation. Consideration of case studies will be included to aid revision.

Psychology of Physical Activity and Health (SP) / (PAH)

Aims:
The discipline of exercise psychology is concerned with the application of psychological principles to the context of physical activity and health related quality of life. This module will seek to provide you with a comprehensive understanding of the psychology theories applied to the contexts of physical activity and health and to evaluate the positive and negative psychological effects of participation in activities.

Indicative Curriculum Content:
The module will examine contemporary theories relating to the adoption and maintenance of a healthy lifestyle. It will also examine the relationship between activity involvement and individual affective responses, cognitions of self and health-related behaviour. Specifically, theories of behaviour change and self-concept will be explored alongside an emphasis on the positive and negative consequences of exercise involvement.

Cognitive Psychology for Sports Performance (SP)

Aims:
one of the basic aims of coaching is to develop skill. Therefore, this module critically examines the strengths and weaknesses of theories concerning the acquisition of skill. Particular attention is placed on the ecological validity of such theories.

Indicative Curriculum Content:
The module covers the following topics: from Information Processing and Ecological Psychology perspectives to pre-instructional factors, observation and feedback, coaching styles, practice, transfer of training, declarative and procedural knowledge, motivation and learning, and arousal and learning. The module will focus on the critical application of theory and research in these areas to practice in coaching and sport science.
Psychology of Training and Competition (SP)

Aims:
One of the fundamental concerns of sports psychologists and coaches is enabling an athlete to perform to their potential when training and competing. In order to do this, sport scientists and coaches must understand the psychological pressures that are inherent in training and competition and the potential consequences of these pressures. This module will seek to develop the student’s understanding of the psychological demands of training and performance and seek to explore ways in which these demands can be managed, regulated and controlled.

Indicative Curriculum Content:
The module will examine psychological factors that contribute to sports performance. This will include theories and approaches to stress and appraisal. Explanations for choking will be considered which will include the role of self-consciousness. This module will also examine research on coping and emotions caused by stress, including theories of anxiety. Finally, attributions following performance success and failure will be examined.

Physiological Aspects of Physical Activity and Health (PAH)

Aims:
Increased incidence of chronic disease within the young and elderly have emphasised the need to explore the inter-relationships between exercise, fitness and health. This module aims to develop an awareness of methods utilised for assessment of health status as well as a theoretical and practical evaluation of common strategies implemented within the health industry.

Indicative Curriculum Content:
The module reviews literature that examines exercise in the context of health and fitness. Health issues such as coronary heart diseases, obesity, diabetes and asthma will be examined with regards to the implications for exercise capacity. Fitness assessment, will be examined with regards to those who are clinically limited, sedentary, moderately fit and recreationally active. Issues associated with health screening and lifestyle management will be discussed.

Sport and Exercise in Extreme Environments (SP)

Aims:
Sport performance frequently takes place in hostile environments. In addition, improvements in communication have opened up the more hazardous locations of the world to the recreational traveller. This module aims to examine the ‘challenge’ of extreme environments to exercise performance. The nature and extent of physiological acclimatisation will be evaluated in identifying the limits of human tolerance. Finally, the application of the body’s acclimatisation responses in enhancing sporting performance will be addressed.

Indicative Curriculum Content:
This module will examine the physiological responses to extreme environments. The consequences of acute exposure to environmental stressors will be identified as well as the mechanisms by which acclimatisation to chronic exposure takes place. Topics covered will include: exercise in hyperbaric environments, altitude training, space physiology, exercise and air pollution, thermoregulation, maintenance of fluid balance and exercise in the heat and cold.
Dr Marcus Smith
Reader in Sport and Exercise Physiology

Marcus is the co-founder of the high profile Clem Burke Drumming Project, a collaborative research project with the University of Gloucestershire on the physiological challenges of high performance rock drumming. Since 2009 he has been working with the Centre for Neuroimaging Sciences at King’s College London investigating the effects of dehydration on brain structure using magnetic resonance imaging.
Physiological Limitations to Sport Performance (SP)

Aims:
Athletic performances span from power and sprint activities lasting less than 10 seconds to endurance activities lasting many hours. The aim of this module is to more fully examine the metabolic, neuromuscular, neuroendocrine and cardiovascular systems of the human body to develop knowledge on the nature of limitations to performance across this intensity spectrum.

Indicative Curriculum Content:
The module examines the ‘challenge of exercise’ in respect to the systems of the human introduced during level 1 modules. ‘Sprint’ and ‘endurance’ will be evaluated in light of application of biochemical and physiological knowledge with a focus on limitations to performance. Topics covered will include: regulation of energy metabolism; central and peripheral fatigue; acid-base status and energetic and fluid balance.

Nutritional Aspects in Health and Disease (SP) / (PAH)

Aims:
Many prevalent diseases in the ‘westernised’ world appear to have close links with inadequate diet and sedentary lifestyles. This module aims to explore the relationship between nutrition and health status before considering some nutritional and exercise strategies that may aid in the prevention or management of these diseases. Consideration will be made of application to ‘special’ populations.

Indicative Curriculum Content:
This module will examine the relationship between nutrition and health with particular focus on prevalent diseases found in the ‘westernised’ world. Topics covered will include: digestion, absorption and storage; the role of micro-nutrients; nutrition and prevalent diseases; obesity; eating disorders; food allergies; under-nutrition and special populations e.g. diabetics.

In addition, year two students may choose to take one of the following available electives:

Health and Fitness across the Generations (SP) / (PAH)
Planning for Sport and Fitness (SP)
Quality Management and Customer Service in Sport and Fitness (SP) / (PAH)
Operational Management (PAH)
Sport and Fitness Marketing (PAH)
Year Three Module Information
Sport Performance (SP) and/or Physical Activity for Health (PAH) routes

**Independent Project (SP)/(PAH)**

**Aims:**
The independent project provides an opportunity to apply the appropriate knowledge, concepts, techniques and research methods of Sport and Exercise Sciences to an in-depth study of a particular question or problem related to sport, exercise or sports therapy. This module aims to foster a greater understanding of the processes used, to undertake a small scale research project, and marks the culmination of your learning experience. The study will enable you to produce a written research report.

**Indicative Curriculum Content:**
You will be encouraged to adopt a problem-solving oriented approach of which the first stage is to identify a problem in sport, exercise or sports therapy which is of interest and relevance to your degree studies. An appropriate approach to addressing the problem is then determined through discussion with tutors who have relevant theoretical and practical expertise. The investigation may be based within a single discipline, or it may involve more than one discipline, but it must be based within the your chosen degree programme. In all cases, tutors will advise on your capability to complete the complexity of the study in the time available and with the necessary resources.

**Issues in Sport and Exercise Sciences (SP)/(PAH)**

**Aims:**
The rapid development of Sport and Exercise Sciences, undertaken in an ever changing environment, means that issues are arising constantly. This module sets out to examine some of the up to date issues facing practitioners and to examine them from single, multi- and/or inter-disciplinary approaches, depending on the nature of the problem.

**Indicative Curriculum Content:**
Specific topics covered will vary to map the contemporary issues of relevance but some likely areas of content include: substance abuse, equal opportunities in the sport and exercise industry, legal and child protection issues, professionalism and training, the role of the sports scientist and the focus on performance or the individual.

**Biomechanical Techniques (SP)**

**Aims:**
This module aims to enable you to develop experimental skills that may be of relevance, not only biomechanics, but also in other scientific fields where accuracy of measurement is important. The experimental skills gained will underpin research in biomechanics and equip you with the skills required for a final year independent project in the area.
Indicative Curriculum Content:
Data analysis techniques in biomechanics; computer simulation and modelling; body segment analysis; electromyography theory and measurement in normal, pathological and sporting situations; application of telemetry to describing human movement; kinematic photographic data collection and analysis e.g. cine, video recording; force platform design feature and various applications in biomechanics analysis; isokinetic dynamometry. Investigation of each biomechanical technique will be accompanied by a consideration of errors.

Exercise and Physical Activity Interventions (PAH)

Aims:
Physical inactivity is recognised as a key predictor of a range of adverse health and social outcomes. Increasing activity levels in the general population is now a priority of government, and opportunities for activity professionals are increasing. This module builds on the core knowledge of exercise psychology gained in SPL205 Psychology of Physical Activity and Health. You will integrate a complex knowledge base derived from sport and exercise, health and mainstream psychology as well as the discipline of health promotion to provide a theoretical underpinning to the professional practice of activity promotion and intervention.

Indicative Curriculum Content:
The module will evaluate the evidence of current practices of professionals involved in physical activity adoption and maintenance. The areas of individual, group-based and community interventions will be examined in terms of their theoretical underpinning, structure and evaluative methods. A particular emphasis will be placed upon interventions with specialised populations and, in particular, children and adolescents.

Applied Sport Psychology 1: Mental Skills and Strategies (SP)

Aims:
Traditionally, sport psychologists have advocated the use of numerous mental skills training techniques that are purported to enhance the cognitive, affective and behaviour state of the performers with whom they work with. These include imagery, goal-setting, relaxation techniques and pre-performance routines. The aims of this module are to explore these mental skills and to explore the research evidence supporting the use of these skills.

Indicative Curriculum Content:
The module will explore the nature and scope of the mental skills that are commonly cited in sport psychology literature as being effective in enhancing sporting performance and promoting positive mental approaches to competition. The module will examine the efficacy of such mental skills and strategies as goal-setting, relaxation and imagery. You will have the opportunity to participate in and deliver these mental skills and strategies to fellow students.
**Training Strategies for Sport Performance (SP)**

**Aims:**
An understanding of training principles is essential when examining participation and performance in sport and exercise. This module aims to develop knowledge of the nature of physiological adaptation in response to exercise training, whilst addressing the concepts of overload, specificity, progression and reversibility. Athletic training will be discussed within theoretical and practical contexts.

**Indicative Curriculum Content:**
This module examines training principles and adaptations across the exercise mode and intensity spectrum. Topics covered will include physiological adaptation to aerobic, anaerobic, strength and power training; flexibility training; the overload principle (frequency, intensity and duration); periodisation of training; overtraining and tapering for performance.

**Nutritional Strategies for Sport Performance (SP)**

**Aims:**
A continuous supply of energy to working muscles is vital for exercise of all modes, intensities and duration. This module aims to explore the relationship between nutrient intake and storage, energy metabolism and exercise performance. Application of issues of sports nutrition for the ‘generic’ athlete will be extended to specific nutrition strategies for selected sport performance.

**Indicative Curriculum Content:**
This module will examine exercise in terms of ‘energy demand’ and ‘energy supply’ and the ways in which the composition of food influences energy metabolism. Diet will be examined in terms of the optimisation of performance and an important component of the module will be the practical application of nutritional theory to the sporting arena. Topics covered will include: factors associated with energy balance; the role of macro- and micro-nutrients in health and performance; dietary strategies to optimise performance; and theoretical and practical issues associated with ergogenic aids.

**Exercise Prescription for Health and Fitness (PAH)**

**Aims:**
Scientific research continues to challenge popular perspectives on the inter-relationships between exercise, fitness and health. This module aims to develop a critical awareness of screening methods, and the methods of individual fitness assessment, which are increasingly being employed within physical education, the leisure industry and clinical rehabilitation centres. Exercise prescription will be examined from both health and fitness perspectives.

**Indicative Curriculum Content:**
This module critically reviews literature that examines exercise in the context of fitness and health. Fitness assessment will be examined with regards to those who are: clinically compromised, sedentary, moderately fit and recreationally active. Health screening, exercise prescription and lifestyle management will be discussed. The exercise needs of healthy individuals in the community shall be addressed, along with those with health problems or disease.
**Physical Activity, Obesity and Diabetes (PAH)**

**Aims:**
This module builds upon previous modules in exercise and health by developing specific skills in the management of diabetes and obesity. It aims to equip the student with knowledge of the physiological, medical and psychological complications associated with these prevalent diseases and the prescription of safe and effective intervention.

**Indicative Curriculum Content:**
The module will commence with the assessment of the epidemiology of the diseases and the biological and behavioural determinants will be discussed. Exploration of the pathophysiology of the disease charting its course through increasing weight, insulin resistance to clinical presentations of diabetes and the concepts of Type I and Type II diabetes will be expanded upon from earlier modules. Assessment of the patient / client will be developed, focusing on physiological assessment, anthropometric measurement, lifestyle and risk factor analysis, dietary factors, stress, medications, socio-economic status. Students will be expected to liaise with various agencies including primary care. Exercise testing and prescription of suitable exercise and lifestyle intervention will be included.

**Cardiovascular Rehabilitation (PAH)**

**Aims:**
This module examines the process of rehabilitation as it pertains to cardiac disease. Detailed exploration of risk factors for coronary disease, psychology of behavioural and lifestyle change, and exercise interventions will be undertaken. The evidence base for its use within the framework of primary, secondary and tertiary care will also be discussed.

**Indicative Curriculum Content:**
The module seeks to explore cardiovascular rehabilitation by using a case study and problem solving approach. Patient assessment, both physiological and psychological, will be introduced. Consideration of risk factors, lifestyle modification, exercise testing and interventions will be brought together to present a holistic approach to the process of rehabilitation. Students will focus on the practical aspects of a rehabilitation practitioner and be expected to engage with patients and health professionals in the development of an individual rehabilitation programme.

In addition, year two students may choose to take one of the following available electives:

- **Health and Fitness across the Generations (SP) / (PAH)**
- **Planning for Sport & Fitness (SP)**
- **Quality Management and Customer Service in Sport & Fitness (SP) / (PAH)**
- **Operational Management (PAH)**
- **Sport & Fitness Marketing (PAH)**
Dr Stephen Myers  
Reader in Exercise Physiology

Steve has worked with our University since 2005, his previous work included working for one of the world’s leading companies for research in defence, aerospace, security and related markets. He is a member of the Birmingham Medical Research Expeditionary Society, and has been studying the effects of altitude as well as the causes and management of acute mountain sickness. Steve’s work with BMRES has resulted in a groundbreaking paper on the effects of exercise on cerebral perfusion at high altitude.

Steve’s other research has covered the physiological and psychological responses to high-speed craft transits (with reports for the UK MoD and US DoD), and he is currently leading a number of other research programmes which cover cycling, British army drill forces and pulmonary oedema.
Sport and Exercise Psychology (BSc Hons)

Sport and exercise psychology has expanded rapidly over the last few years, with an increasing need and recognition of sport science support services, and public health and well-being.

The London 2012 Olympic Games provided us with an example of the role played by sport and exercise psychology, both in preparing elite level athletes for the pressures of competition, as well as in fostering the health legacy of the Games. There has been and there will continue to be, a growth in demand for well qualified sport and exercise psychologists. At the University of Chichester, we are well placed to contribute to meeting this demand. The University of Chichester offers one of the few British Psychological Society (BPS) accredited courses in the UK. It is taught by well-qualified and enthusiastic staff who have excellent national and international research and consultancy profiles.

92%

Student Satisfaction

The National Student Survey is an independent market research survey carried out by Ipsos MORI. Final year students are asked about their experience of the course. Our Undergraduate Sports courses delivered in the Department of Sport and Exercise Sciences achieved an average student satisfaction rating of 92% in the 2012 Survey.
Year One Module Information

**Introduction to Sport and Exercise Psychology**

**Aims:**
Sport and exercise contexts provide a fascinating and complex opportunity to investigate elements of the psychology of human behaviour. The impact of social psychological factors on the participation in and performance of sport and exercise behaviour is critical for both coaches and performers to understand. Theoretical perspectives and research findings from a number of current areas within the field will provide students with guidance on how behaviour can be shaped in both sporting and physical activity settings.

**Indicative Curriculum Content:**
The module content will include material selected from the following: introduction to key concepts in the Psychology of Sport and Exercise situations including motivation for achievement and participation, individual difference characteristics of elite performers, group cohesion and leadership.

**Principles of Psychology**

**Aims:**
To enable you to understand the principle of theoretical perspectives in psychology.

**Indicative Curriculum Content:**
The module seeks to enable you to understand the development of modern psychology, and to understand its current scope and methods of investigation. The module will examine the origins and development of modern psychology. It will focus on the main approaches to studying and describing human behaviour, for example behaviourism, the psychodynamic approach, the humanistic approach, the cognitive approach and the biological basis of behaviour. These will be examined with relevance to key studies in the area and to contemporary issues. The module will also aim to introduce you to methods used by psychologists.

**Psychology of Human Interaction**

**Aims:**
To understand a broad area of everyday functioning and experience in terms of the behaviours, feelings, attitudes, and mental processes involved in that experience. The module aims to use functional analysis so that a broad experience can be broken down into a series of questions concerning the sub-functions and behaviours involved, allowing the psychological constructs and theories that are associated with those behaviours to be elucidated and explored. Exploration will involve appropriate methods to investigate what psychological constructs and theories relate to relevant behaviours and function.
Indicative Curriculum Content:
The module will explore the experience of making friends through the processes related to forming an impression of a person, feeling attracted or not to them, wanting to be their friend, getting to know them and forming a relationship with them, through a variety of behaviours, such as approaching them, talking to them, and meeting them socially. Psychological theories and empirical findings from investigations into impression formation, attraction, prejudice, stereotyping and relationship formation will be introduced, and observational methodology will be explored.

Scientific Inquiry into Sport and Exercise

Aims:
The module aims to provide you with a foundation in study and research skills which will support and underpin work in other sports science modules.

Indicative Curriculum Content:
The module will be split into four blocks which will use a particular sporting context to develop study and research skills through practical application. In addition, you will be introduced to simple methods of qualitative and quantitative research and data analysis together with the philosophies that underpin them.

Perspectives on Psychology

Aims:
An important part of understanding the discipline and study of psychology is knowledge of the ways in which the study of brain, mind and behaviour has been shaped. This module aims to introduce the background and work of prominent figures who influenced the development of modern psychology and encourage you to begin to explore for yourself, key thinkers in Psychology.

Indicative Curriculum Content:
The module seeks to enable you to understand the contribution of key thinkers to the development of modern psychology, and to appreciate their biographical backgrounds. The lives and work of key thinkers will be introduced, and contextualised with reference to contemporary ideas and mores.
Interpersonal Skills

Aims:
Communicating and interacting with others is a natural occurrence in everyday life. In occupations such as sports, exercise, leisure management, these skills are essential and require person to person interaction and development of sound working relationships. The aim of this module is to provide a basis to explore the nature of communication and inter-personal behaviour. This module provides the opportunity to develop a critical understanding of the value and limitations of group work within the sports related field.

Indicative Curriculum Content:
The module will begin with a consideration of the nature of inter-personal behaviour and the constitute elements. This will provide an opportunity to explore models of communication as well as the basis of verbal and non-verbal communication in relation to group work skills and theory. Practical communication skills which are essential to the work of the applied sport and exercise psychologist will be developed. In addition, students can develop an insight into the implications of group dynamics on group maintenance on group functioning.

Acquisition and Performance of Sports Skills

Aims:
The study of coaching, sport and exercise related sciences require at least a rudimentary understanding of the psychological principles underlying skill acquisition and performance. This module sets out to provide you with that basic knowledge. The knowledge may be an end in itself, but also forms the basis of further study in this area.

Indicative Curriculum Content:
The first part of the module examines the psychological factors involved in performance: sensation, perception, reaction time, decision making, anticipation and efferent organisation. The second part examines factors affecting skill acquisition: memory, feedback and practice. Throughout the module, the relative strengths and weaknesses of Information Processing Theory and Ecological Psychology Theories are discussed.
Year Two Module Information

**Researching Sport and Exercise**

**Aims:**
The module builds on experience gained at level one. It aims to enhance analytical skills and to develop the ability to conduct small scale research project within Sports Science. In addition the module aims to guide you to complete a research proposal suitable for an independent project/dissertation at level three.

**Indicative Curriculum Content:**
Your experience with statistics will be expanded to support the analyses required in other component modules of each of the degree programmes to which this module contributes. It will explore the theories underpinning research and will address ethical issues relating to such work. You will be encouraged to formulate a research project and construct a research proposal. Through a small scale project students will gain experience of conducting research within an area of personal interest.

The final part of the module will focus on the development of a proposal for an independent project to be conducted at level three.

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**Cognitive Psychology for Sports Performance**

**Aims:**
One of the basic aims of coaching is to develop skill, therefore this module critically examines the strengths and weaknesses of theories concerning the acquisition of skill. Particular attention is placed on the ecological validity of such theories.

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**Developmental Psychology**

**Aims:**
Developmental Psychology involves the study of development and maturation in cognitive, personality and social processes. The aim of the module is to introduce students to basic theory, research findings and methods of investigation in childhood, adolescence and lifespan development. The module will aim to provide a critical understanding of the ways in which behaviour is influenced by developmental factors, the nature of developmental processes, and the ways which empirical research can help us to understand how developmental processes influence what we do.

**Indicative Curriculum Content:**
The module will provide an introduction to the ways developmental processes have been studied, for example through observational and case study methodologies. The areas of attachment, social relations, cognitive and language development will be investigated in terms of underlying theory and empirical research.
**Biological Psychology**

**Aims:**
Biological Psychology involves the study of the biological and physiological bases of mind and behaviour. The aim of the module is to introduce students to basic theory, research findings and methods of investigation in behavioural genetics, neuropsychology, socio-biology and evolutionary psychology. The module will aim to provide a critical understanding of the ways in which behaviour is influenced by biological factors, the nature of the processes involved in biological processes, and the ways which empirical research can help us to understand how biological processes influence what we do.

**Indicative Curriculum Content:**
The module will provide an introduction to the ways biological processes have been studied, for example through brain lesions and cell stimulation methodologies. The areas of behavioural genetics, neuro-imaging, neuropsychology, socio-biology and evolutionary psychology will be investigated in terms of underlying theory and empirical research.

**Psychology of Physical Activity and Health**

**Aims:**
The discipline of exercise psychology is concerned with the application of psychological principles to the context of physical activity and health-related quality of life. This module will seek to provide students with a comprehensive understanding of the psychological theories applied to the contexts of physical activity and health and to evaluate the positive and negative psychological effects of participation in activities.

**Indicative Curriculum Content:**
The course will examine contemporary theories relating to the adoption and maintenance of a healthy lifestyle. It will also examine the relationship between activity involvement and individual affective responses, cognitions of self and health-related behaviour. Specifically, theories of behaviour change and self-concept will be explored alongside an emphasis on the positive and negative consequences of exercise involvement.

**Social Psychology**

**Aims:**
Social Psychology is the study of how the thought processes of individuals are influenced by the people that they come into contact with in their everyday lives. The aim of the course is to introduce students to basic theory, research findings and methods of investigation in Social Psychology. By the end of the module students should be able to: describe the important theories and research findings in Social Psychology; discuss the theories and key findings covered in the course and their relevance to everyday life; understand and think critically about issues and research in Social Psychology. During the course we will examine firstly the extent to which behaviour is influenced by social factors and secondly the ways in which empirical research can help us to understand how social processes influence what we do.

**Indicative Curriculum Content:**
The module will provide an introduction to Social Psychology and social cognition. The module will cover topics such as person perception, social influence, stereotyping and prejudice, attitudes, attributions, group processes, and attraction and close relationships.
**Psychology of Training and Competition**

**Aims:**
One of the fundamental concerns of sports psychologists and coaches is enabling an athlete to perform to their potential when training and competing. In order to do this sport scientists and coaches must understand the psychological pressures that are inherent in training and competition and the potential consequences of these pressures. This module will seek to develop your understanding of the psychological demands of training and performance and seek to explore ways in which these demands can be managed, regulated and controlled.

**Indicative Curriculum Content:**
The module will examine psychological factors that contribute to sports performance. This will include theories and approaches to stress and appraisal. Explanations for choking will be considered which will include the role of self-consciousness. This module will also examine research on coping and emotions caused by stress, including theories of anxiety. Finally, attributions following performance success and failure will be examined.

**Individual Differences Psychology**

**Aims:**
Individual Differences Psychology involves the study of personal, cognitive, affective, and ethnic attributes along which people differ from one another. The aim of the module is to introduce students to basic theory, research findings and methods of investigation in personality, intelligence, cognitive style, mood, mental health, gender, and ethnicity. The module will aim to provide a critical understanding of the ways in which behaviour is influenced by individual difference factors, the nature of the processes involved in individual differences, and the ways which empirical research can help us to understand how individual differences influence what we do.

**Indicative Curriculum Content:**
The module will provide an introduction to the ways individual differences processes have been studied, for example through psychometrics and case study methodologies. The areas of personality, intelligence, cognitive style, motivation, gender and ethnicity will be investigated in terms of underlying theory and empirical research.
Year Three Module Information

**Independent Project BSc (Hons)**

**Aims:**
The independent project provides an opportunity to apply the appropriate knowledge, concepts, techniques and research methods of Sport and Exercise Sciences to an in-depth study of a particular question or problem related to sport, exercise or sports therapy. This module aims to foster a greater understanding of the processes to undertake a small scale research project, and marks the culmination of the student’s learning experience. The study will enable you to produce a written research report.

**Indicative Curriculum Content:**
You will be encouraged to adopt a problem-oriented approach of which the first stage is to identify a problem in sport, exercise or sports therapy which is of interest and relevance to your degree studies. An appropriate approach to addressing the problem is then determined through discussion with tutors who have relevant theoretical and practical expertise. The investigation may be based within a single discipline, or it may involve more than one discipline, but it must be based within your chosen degree programme. In all cases, tutors will advise on the capability of the student to complete the complexity of the study in the time available and with the necessary resources.

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**Applied Sport Psychology I: Mental Skills and Strategies**

**Aims:**
Traditionally, sport psychologists have advocated the use of numerous mental skills training techniques that are purported to enhance the cognitive, affective and behavioural states of the performers with whom you work with. These include imagery, goal-setting, relaxation techniques and pre-performance routines. The aims of this module are to explore these mental skills, and to explore the research evidence supporting the use of these skills.

**Indicative Curriculum Content:**
The module will explore the nature and scope of some of the mental skills that are commonly cited in sport psychology literature as being effective in enhancing sporting performance and promoting positive mental approaches to competition. The module will examine the efficacy of such mental skills and strategies as goal-setting, relaxation and imagery. You will have the opportunity to participate in and deliver these mental skills and strategies to fellow students.

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**Applied Sport Psychology II: Professional Practice**

**Aims:**
In Applied Sport Psychology I, students experienced and evaluated a range of sport psychology interventions that are currently used and advocated by sport psychologists. However, the delivery of such interventions is only part of the potential work of the sport psychologist.
The aim of this module is to examine the nature of applied sport psychology practice and discuss and evaluate how sport psychologists go about enhancing the mental states, well-being and performance of the clients they work with.

**Indicative Curriculum Content:**
The module will explore the nature and scope of practice, and the varied role of the applied practitioner as a mental skills trainer, counsellor, clinician, and in an organisational capacity will be examined. Approaches to and models of practice will be explored, alongside research evidence for their relative efficacy. Practical case examples will be used throughout the module as exemplars of applied practice in action, and to discuss critical professional and ethical issues that the practitioner might encounter.

**Exercise & Physical Activity Interventions**

**Aims:**
Physical inactivity is recognised as a key predictor of a range of adverse health and social outcomes. Increasing activity levels in the general population is now a priority of government, and opportunities for activity professionals are increasing. This module builds on the core knowledge of exercise psychology gained in SPL205 Psychology of Physical Activity and Health. Students will integrate a complex knowledge base derived from sport and exercise, health and mainstream psychology as well as the discipline of health promotion to provide a theoretical underpinning to the professional practice of activity promotion and intervention.

**Indicative Curriculum Content:**
The course will evaluate the evidence of current practices of professionals involved in physical activity adoption and maintenance. The areas of individual, group-based and community interventions will be examined in terms of their theoretical underpinning, structure and evaluative methods. A particular emphasis will be placed upon interventions with specialised populations and, in particular, children and adolescents.

**Group Dynamics**

**Aims:**
Due to the pervasive nature of groups within sport and the potential impacts that groups can have on an individual’s performance, sporting enjoyment and psychological well-being it is important for coaches, teachers and sport scientists to have an understanding of group dynamics. The aims of this module are therefore to examine and evaluate current knowledge of group productivity and functioning to sports groups and to evaluate current practice in team-building programmes.

**Indicative Curriculum Content:**
The module will examine those factors that contribute to group productivity and functioning. These will include the abilities of team members, the impact of the group environment, group organisation and leadership, team cohesion, communication, team confidence. The module will also examine the effectiveness of team-building techniques and programmes.
Managing the Research Process in Sport and Exercise Psychology

Aims:
The process of conducting research involves a range of skills including project management, ethical approval, data handling and the presentation of results to various audiences. The aim of this module is to provide students with the opportunity to learn and develop a range of skills required in the process of conducting research. You will learn about the philosophical underpinnings of psychological enquiry, ethical considerations for conducting psychology research projects, methods for conducting a critical appraisal of the research literature and criteria for judging research quality. At the end of the module you will showcase your own individual research in a conference through poster presentation and oral defence.

Indicative Curriculum Content:
The course will cover the skills required to manage a research project from conception to completion. Through a series of sessions you will address: the philosophical and conceptual underpinnings of the research process; considerations to conducting inductive versus deductive research; the process of ethical approval; project proposal and refinement; project time management and planning; interpretation and presentation of results and you will present the final research in written and visual output.

“The sport and exercise psychology degree has been brilliant at broadening my horizons to a variety of different career prospects. It is a very friendly university and the staff and resources were excellent. This enabled an enjoyable learning experience”.

Alison Sanders, BSc Sport and Exercise Psychology student 2009-2012

Elective Modules

The following Electives can be chosen for Year 3 of the Sport and Exercise Psychology Programme:

- Psychology of Injury and Rehabilitation
- Psychology in Context: Work and Organisations
Above: Rebecca Thompson-Agbro features regularly for Brighton and Hove Albion in women's football. Main image: Sport and Exercise Science student Amy Seabright, pictured left with crew Eilidh McIntyre, is already part of the transitional Olympic squad and targets success at the 2016 Games.
We can boast an impressive high-performance sports portfolio through support for a number of elite athletes and competitive teams.

We consistently perform well against other elite university sport. A high number of our performance teams compete in the British Universities and Colleges Sport (BUCS) programme at elite level including our Women’s Rugby and both Football 1st teams in the Premiership South.

Several teams are supported with high-level coaching, training facility support and sports science analysis.

Numerous local and national sports clubs’ links with our student sports teams provide additional high-level playing opportunities.

The gifted athlete scholarship programme supports a range of talented performers in their sport whilst they study at Chichester.

The most recent programme has supported a wide range of athletes including a Commonwealth judo champion, a potential 2016 Olympic sailor and a female England cricketer.

The programme provides the following for successful applicants:

- Award of up to £500
- Free SARC gym gold membership
- Free Sports Federation membership
- A supervised strength and conditioning programme
- Physiotherapy support

The Students’ Union also supports international representative sport with nearly 100 students selected for England and Great Britain University Squads in the past decade.

To find out more
Sid Fletcher, Students’ Union, Sports Development Manager

• 01243 816324
• Email: s.fletcher@chi.ac.uk
The aim of the programme is to broaden and deepen your understanding of sports therapy through the academic study of sports medicine and sports science. As a sports therapist you are an integral part of the multi-disciplinary team necessary to provide the best care, management and rehabilitation for sport and recreational participants, regardless of age and ability.

It utilises the principles of sport and exercise sciences incorporating physiological and pathological processes to prepare the participant for training, competition and, where applicable, work.

You will gain competencies in:
• Proving immediate care of sports trauma and basic life support in a recreational, training and competitive environment.
• Examination and assessment of sports injuries (spinal and peripheral joints) and, where appropriate, refer on for specialist advice and intervention.
• Planning and implementing appropriate treatment regimes for the injured athlete.
• Soft tissue manipulation and sports massage pre and post-activity.
• The rehabilitation of the patient/athlete back to optimum levels of functional, occupational and sports specific fitness.
• Utilising sports and exercise principles to optimise preparation and injury prevention programmes.
• Electrotherapy including modalities such as ultrasound, interferential, transcutaneous electrical nerve stimulation and laser.

The degree also contains the study of sports science, essential elements for a practitioner prescribing exercise. These include knowledge of human anatomy, cellular and exercise physiology, sports psychology, sports biomechanics and sports nutrition. Modules are supported by the latest research findings.
Year One Module Information

**Sports Injury Management 1**

**Aims:**
This module aims to introduce students to the role of the Sports Therapist in the management and treatment of injury. It provides a basic foundation on which to build further knowledge, skill and expertise. Practical work will cover an introduction to examination and assessment, planning and carrying out safe and effective treatment and management of lower limb sports injuries. It will also include the provision of immediate care for sports trauma and basic life support. The student will learn and develop the skills of soft tissue manipulation and remedial massage.

**Indicative Curriculum Content:**
The module will examine the functional and clinical anatomy of the lower limb. Topics will cover basic pathology, such as inflammation, repair and homeostasis; the provision of on-field sports trauma care; examination and assessment procedures of the lower limb including the hip, knee ankle and foot complexes, common sports injuries of these lower limbs; planning and progressing appropriate treatment programmes; the basic components of a rehabilitation programme; taping techniques used in the treatment and prevention of injury; thermal treatments relevant in sport therapy; an introduction to the skills and techniques of soft tissue manipulation and remedial massage, including contraindications, physiological and therapeutic effects; the ethical and legal requirements of maintaining a comprehensive medical records system.

**Human Anatomy**

**Aims:**
This module aims to develop an understanding of the structures and functions of the musculoskeletal system of humans within the context of sports and exercise. Practical work will develop palpatory skills, analyse joint movement and investigate the muscles involved in limb and trunk activity.

**Indicative Curriculum Content:**
The module will cover the main features of bones of the upper and lower extremity and vertebral column; the classification and ligamentous attachments of the joints of the upper and lower extremity and vertebral column; the movements of these joints; the muscles producing these movements; the main attachments of the muscles of the upper and lower extremity, their actions, functions and nerve supply; the form of skeletal muscles, tendons aponeuroses, fascia, sheaths and retinaculae.

**Physiology of the Exercising Human**

**Aims:**
This module aims to develop an understanding of the structures and functions of the biological systems of humans within the context of sport and exercise. Aspects of integrated control will also be developed to allow an initial grounding in factors underpinning energetics.

**Indicative Curriculum Content:**
The module will examine the structures and functions of the skeletal, neuromuscular, respiratory, cardiovascular, endocrine, digestive and thermoregulatory systems, as well as considering some aspects of their integrated control. Work will be placed within the context of the exercising human.
**Pathophysiology for Sports Therapists**

**Aims:**
This module aims to enhance students’ knowledge of the structure and function of body tissues. The integration of the normal physiology of body tissues and the pathological conditions that may commonly affect the athlete is the main theme running through this module.

**Indicative Curriculum Content:**
The module will examine an understanding of fundamental physiological functions and cellular physiology, including a basic structure and function common to all cell types; the specialized requirements of cells necessary for normal function; transport mechanisms across cell membranes; the structure, functions and locations of epithelial and basic connective tissues; the structure, functions of blood and blood vessels; blood clotting mechanisms; the structure and function of the musculoskeletal system including cartilage, bone and muscle; the structure and functions of the central, autonomic and peripheral nervous system.

This module will also develop an understanding of the theoretical concepts and practical issues which apply to the discipline of pathology. This includes the general pathological changes in tissues including inflammation and the healing process; basic principles of immunity and immune reactions; fractures and fracture healing; classification of injury and regeneration of nerve fibres; the physiology, and clinical manifestations of pain of and the relevance of these pathological changes in the body tissues to sports therapy practice.

**Bioenergetics and the Exercising Human**

**Aims:**
This module aims to develop an understanding of energy metabolism within the exercising human. As such, the machinery associated metabolic processes across the intensity spectrum will be addressed.

**Indicative Curriculum Content:**
The module will examine the basic biochemistry of metabolic processes during muscle contraction as well as an introduction to fatigue during sport performance. Some topics to be covered include: aerobic and anaerobic metabolism; enzyme action and acid-base balance.
**Introduction to Sports Biomechanics**

**Aims:**
This module aims to introduce the basic concepts of biomechanics as they relate to human movement and performance in sport and exercise. Students are shown how the basic physical principles underpin performance in sport, and how such principles can be practically investigated. Practical work considers the general principles of biomechanics related experimental methodology, data analysis, and statistical analysis for practical investigations into the evaluation of sport and exercise.

**Indicative Curriculum Content:**
The module content will include physical concepts such as: Newton's laws of motion; force; mass; gravity; ground reaction force; friction; torques; moments; momentum; coefficient of restitution; equations of motion; linear and angular displacement; velocity and acceleration; centripetal force; angular momentum; and inertia. Kinetic energy, potential energy, work power. Muscle kinetics/energetics. Projectile motion, Magnus effect, spin, lift and drag. Biomechanical kinetic and kinematic measurement methods and tools used for assessment/analysis in sport and exercise.

**Research Methods for Sports Therapy**

**Aims:**
This module provides you with a foundation of research skills, which will support research work in sports therapy in general and in particular, in other modules within the programme. It aims to introduce you to the philosophies that underpin different forms of research and to basic techniques of qualitative and quantitative data analysis.

**Indicative Curriculum Content:**
The module will explore the positivist and interpretivist philosophies that underpin research paradigms. You will explore the research process and design a small scale group study. They will gain experience in data collection and both qualitative and quantitative data analysis. Quantitative data analyses will include exploratory data analysis and two group tests of difference. The module will also examine the concepts of reliability and validity.
Year Two Module Information

**Rehabilitation and Remedial Therapy**

**Aims:**
This module will allow you to consolidate your theoretical knowledge and practical ability to apply progressive exercise programmes that are appropriate to the needs of athletes at all levels of the sporting and injury spectrum. It will provide you with the knowledge, understanding and practical abilities to plan and implement safe and effective rehabilitation programmes that are both injury and sport specific.

**Indicative Curriculum Content:**
This module will explore the principles of training and components of fitness; methods of training and rehabilitation; stages of rehabilitation, aims and relevant components at each stage and criteria for progression through the stages; the maintainance and improvement flexibility, muscular strength, endurance and power; aerobic endurance and anaerobic power; re-establishing neuromuscular control progressing to the required motor skills specific to the sport/occupation; re-training sports specific skills; remedial back care; designing progressive programmes; teaching of exercise and leading rehabilitation sessions; assessment and monitoring of rehabilitation; strategies to enhance motivation, compliance and adherence and strategies for injury prevention.

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**Sports Injury Management 2**

**Aims:**
This module aims to provide you with the knowledge, understanding and ability to provide the safe and effective assessment and management of soft tissue and sport related injuries. It is also equips the students with an insight into clinical pathology and an understanding of the mechanisms of disease aetiology. This module will also provide the student with an opportunity to complete a unit of directed study, incorporating a clinical observation of a minimal 35 hours in a clinical environment, relevant to your needs and career aspirations.

**Indicative Curriculum Content:**
This module will explore the functional and clinical anatomy of the upper limb, including osteology, myology, neurology and arthrology; functional and clinical anatomy of the lower limb; principles of examination and assessment of the patients prior to planning and implementing rehabilitation programmes; common injuries of the upper limb, including aetiology, clinical features, prognosis, treatment and rehabilitation; upper limb fractures, causes and clinical features; bracing and strapping, its uses and abuses in sport; disorders of the nervous system, including peripheral nerve lesions; disorders of the brain and spinal cord; communicable diseases in the sporting arena; sports medicine and special groups, including the younger, older and female athlete; the understanding of the effects of various medications in the sports environment; appropriate use of investigations in sports medicine diagnosis; skills and techniques of soft tissue manipulation and remedial massage to the upper limbs; medical records and recording; clinical reasoning skills by way of specific case studies to develop a rational approach to the selection of treatment techniques during sport injury rehabilitation. A clinical placement of 35 hours will be undertaken.
Researching Sport & Exercise

Aims:
The module builds on the experience gained at level one. It aims to enable you to complete a research proposal and to conduct a small scale research project within the field of Sport & Exercise Sciences.

Indicative Curriculum Content:
Your experience with statistics will be expanded to support the analyses required in other component modules of each of the degree programmes to which this module contributes. It will explore the theories underpinning research and will address ethical issues relating to such work. You will be encouraged to formulate a research project and construct a research proposal. Through a small scale project, students will gain experience of conducting research within an area of personal interest. The final part of the module will focus on the development of a proposal for an independent project to be conducted at level three.

Physiological Aspects of Physical Activity and Health

Aims:
Increased incidents of chronic disease within the young and elderly have emphasised the need to explore the inter-relationships between exercise, fitness and health. This module aims to develop an awareness of methods utilised for assessment of health status as well as a theoretical and practical evaluation of common strategies implemented within the health industry.

Indicative Curriculum Content:
The module reviews literature that examines exercise in the context of health and fitness. Health issues such as coronary heart disease, obesity, diabetes and asthma will be examined with regards to the implications for exercise capacity. Fitness assessment will be examined with regards to those who are clinically limited, sedentary, moderately fit and recreationally active. Issues associated with health screening and lifestyle management will be discussed.
**Biomechanics and Performance Analysis in Sports and Exercise**

**Aims:**
This module aims to extend your knowledge and practical skills in the application of biomechanics to specific sport and exercise activities. The emphasis will be on the application of biomechanics in the assessment, evaluation and improvement of technique in a range of sports. You will be introduced to notational analysis and its place in the scientific support of individuals and teams. In addition, the relationship between the biomechanist, performance analyst and coach will be explored. Practical experiences will include the role of biomechanical kinetic and kinematic assessment in the analysis of sport and the application of hand and computerised notation systems to individual and team sports.

**Indicative Curriculum Content:**
The biomechanics principles underpinning performance in a range of sports will be considered in relation to the practical performance of sport. The module content will include analysis methodologies and research which has enhanced biomechanics knowledge of sports performance. The biomechanics analysis and evaluation of selected sport and exercise activities will be considered. e.g. golf, football, tennis, high jump, long jump, javelin, discus, gymnastics, cycling, swimming and hand and computerised notational analysis techniques.

**Neuromusculoskeletal Manual Therapy to the Spine**

**Aims:**
This module aims to build upon the concepts of manual therapy techniques developed in Sports Injury Management one and two. It will provide the student with ability to conduct safe and effective assessment and treatment techniques to the cervical, thoracic, lumbar vertebrae of the injured athlete.

**Indicative Curriculum Content:**
This module will explore common conditions and sporting injuries of the spine including aetiology, clinical features and prognosis; the functional anatomy of the cervical, thoracic, lumbar and sacroiliac joints; the principles of examination and assessment of the spine; the practical application of joint mobilisation techniques to the spine; the clinical reasoning skills to develop a rational approach to the selection of joint mobilisation techniques to the spine; an understanding of the therapeutic effects, indications, contraindications and precautions of joint mobilisation techniques to the spine and the skills and techniques of soft tissue manipulation and remedial massage to the trunk.
Year Three Module Information

**Independent Project**

**Aims:**
The independent project provides an opportunity to apply the appropriate knowledge, concepts, techniques and research methods of Sport and Exercise Sciences to an in-depth study of a particular question or problem related to sport, exercise or sports therapy. This module aims to foster a greater understanding of the processes used to undertake a small scale research project, and marks the culmination of your learning experience. The study will enable you to produce a written research report.

**Indicative Curriculum Content:**
You will be encouraged to adopt a problem-oriented approach of which the first stage is to identify a problem in sport, exercise or sports therapy which is of interest and relevance to their degree studies. An appropriate approach to addressing the problem is then determined through discussion with tutors who have relevant theoretical and practical expertise. The investigation may be based within a single discipline, or it may involve more than one discipline, but it must be based within the student's chosen degree programme. In all cases, tutors will advise on your capability to complete the complexity of the study in the time available and with the necessary resources.

**Advanced Neuromusculoskeletal Manual Therapy**

**Aims:**
This module aims to extend the your knowledge and practical skills in the application of peripheral joint mobilisation techniques. It will re-visit and further develop the peripheral joint examination and assessment techniques and also provide you with a resource that will assist you to improve your clinical reasoning.

**Indicative Curriculum Content:**
This module will cover the functional anatomy underpinning the application of joint mobilisation techniques to the hip, knee, ankle, foot, shoulder, elbow, wrist and hand complexes; examination and assessment differential diagnosis; the application of Combined Movement Theory in the assessment and management of the injured athlete; the practical application of mobilisation techniques to the peripheral joints; case studies to develop the clinical reasoning and a rational approach to the selection of joint mobilisation techniques and research and current trends to support the use of manual therapy.
**Psychology of Injury and Rehabilitation**

**Aims:**
This module aims to enable students to explore the social and psychological factors in injury risk, theories of psychological reactions and responses of sports participants to injury, and psychological factors that impact on recovery from injury and adherence to rehabilitation programmes. It will critically evaluate theory and research, and consider practical approaches to working with athletes to assist them with their response to and rehabilitation from injury experiences.

**Indicative Curriculum Content:**
The module will examine the social and psychological factors thought to underlie susceptibility to injury, drawing from theory and research. It will then examine the theory and research on athlete response and reaction to injury, and progress to consider key psychological factors which impact on the athlete's progress through rehabilitation. It will take an applied perspective in focusing on various techniques and strategies that could be used to promote psychological recovery from injury.

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**Nutritional Strategies for Sport Performance**

**Aims:**
A continuous supply of energy to working muscles is vital for exercise of all modes, intensities and duration. This module aims to explore the relationship between nutrient intake and storage, energy metabolism and exercise performance. Application of issues of sports nutrition for the ‘generic’ athlete will be extended to specific nutrition strategies for selected sport performance.

**Indicative Curriculum Content:**
This module will examine exercise in terms of ‘energy demand’ and ‘energy supply’ and the ways in which the composition of food influences energy metabolism. Diet will be examined in terms of the optimisation of performance and an important component of the module will be the practical application of nutritional theory to the sporting arena. Topics covered will include: factors associated with energy balance; the role of macro- and micro-nutrients in health and performance; dietary strategies to optimise performance and theoretical and practical issues associated with ergogenic aids.
**Clinical Placement**

**Aims:**
This module aims to provide you with an opportunity to complete a unit of directed study, incorporating a clinical placement in a practical based setting, relevant to the student’s needs and career aspirations. You will develop new knowledge and skills while in practice-based settings, in addition to applying, consolidating and reflecting on the learning gained in the university environment.

**Indicative Curriculum Content:**
Clinical placements are undertaken in a variety of settings such as sports injuries clinics, rehabilitation centres and professional sports clubs throughout the UK. The module focuses on developing the practical, communication, clinical reasoning and reflective skills. Students produce a reflective learning portfolio incorporating a series of entries and self-review of the activities that have been completed during the clinical placement. All students provide sports therapy cover in the university sports injury clinic for a half a day a week throughout their final year of study. Students also have the opportunity to provide on-field sports therapy cover for the university sports teams.

**Therapeutic & Clinical Electrotherapy**

**Aims:**
This module aims to provide the student with the theoretical knowledge and practical expertise to apply ultrasound, TENS, interferential and LASER safely and effectively. It will equip the student with the clinical reasoning regarding the implementation of these modalities. It will also investigate the research regarding the usage of these modalities.

**Indicative Curriculum Content:**
This module will focus on the physical principles, dangers, effects and safety aspects of electrical equipment; the clinical and practical applications of the modalities of therapeutic ultrasound, interferential, TENS, and LASER therapy; the ethical issues, physical effects, physiological effects, therapeutic effects, dangers, precautions and contraindications for these modalities will be considered.

**Advanced Sports Injury Management**

**Aims:**
This module provides the opportunity for you to consolidate your knowledge and further develop your existing skills. The module aims to challenge current concepts in sports therapy practice, assisting in improving your clinical reasoning and preparing you for the complexities and realisms of clinical practice in the sporting environment.

**Indicative Curriculum Content:**
This module will focus on integrating skills to manage, totally specific injuries by region namely; lumbar, cervical, thoracic, sacroiliac, ankle, knee, hip and groin, shoulder, elbow, wrist and hand. Current research will be examined and critiqued on assessment approaches, therapeutic strategies and techniques involved in the prevention, treatment and rehabilitation of musculoskeletal function and their efficacy will be evaluated. It will incorporate current information from related fields including applied anatomy and biomechanics.
Sport Science and Therapy Service

Our Sport Science and Therapy Service provides world class service and support to world leading teams such as the British Sailing Team, and has an established tradition of working with GB national squads, for example the Amateur Boxing Association, GB Cycling, and Table Tennis.

As the Sports Performance and Rehabilitation Unit (SPRU) in the Chichester Centre of Applied Sport and Exercise Science (CCASES), we currently provide support to the Royal Yachting Association, and staff members are active consultants with other governing bodies and organisations such as British Swimming. We have a team of consultants — many of whom are BASES Accredited, BPS Chartered, or hold another specialist qualification — in Sport Psychology, Sport Biomechanics, Exercise Physiology, and Sports Therapy. We also have Coaching Science specialists who are experienced coach educators, and have been involved in course delivery for governing bodies at regional and national level. We are involved in a programme of applied research — and seek to integrate our research into our work with clients where appropriate, ensuring that we are at the cutting edge in both service delivery, and in contributing to the knowledge base to support sustained World Class performance in sport in the UK. Further detail on the range of our services is provided below.

CCASES and SPRU have state-of-the-art sport science facilities, including two biomechanics laboratories, four physiology laboratories, two sport psychology laboratories and two sports injury clinics. Additionally, there is a fitness suite and strength and conditioning room.
**Sport and Exercise Psychology**
How we think and feel has a major impact on how we perform as athletes. Sport Psychologists at SPRU will work with you to identify how you can change what you think and feel to develop a winning mindset that will impact positively on your performance. We offer group sessions to clubs, teams and organisations, and support on an individual basis. In each instance, we assess what you need (as an individual or group), and design and deliver bespoke packages of support that dovetail with other elements of your training programme. Sport Psychologists at SPRU are highly experienced at delivering support to elite and sub-elite athletes, and are accredited by the British Association of Sport and Exercise Sciences and/or hold Chartered status with the British Psychological Society.

**Sports Biomechanics**
Sports Biomechanics sits in an area that can aid athletes, teams and coaches in performance enhancement, and injury prevention. We mainly deal with technique analysis, adaptation, assessment, and rehabilitation. We also have some roots in the fields of ergonomics and engineering, and have been involved with the design and collection of empirical data for new designs of sports equipment. Our consultancies are performed in the biomechanics laboratory here at SPRU.

**Exercise Physiology**
Physical activity is based upon the success of an individual to meet one key challenge, that is, the ability to match energy demand with energy supply. Energy systems within the human body are the same. However, the ability to increase the rate or capacity of such systems through training distinguishes between recreation and elite performers. We offer testing procedures that provide an insight into the limitations of such systems, forming the basis for future training. For those individuals competing in extreme environments, such as hot / cold or at altitude, an understanding of the specific physiological challenge is required and the development of a strategy to overcome such conditions. Exercise physiologists at SPRU are highly experienced at delivering sport science support across a range of activities and providing support to those individuals competing in hostile environments around the globe. The Sport Performance Laboratories and staff are accredited by the British Association of Sport & Exercise Sciences.

To find out more
- Tel: +44 (0)1243 816100
- Email: SPRU@chi.ac.uk
- Web: www.chi.ac.uk/spru
Based within the University of Chichester, the Sport Performance and Rehabilitation Unit (SPRU) provides bespoke services to help maximise performance by utilising the University’s expertise in areas such as sports psychology, physiology, nutrition and human movement and performance analysis.

SPRU offers a range of cutting edge Physiotherapy and Sports Therapy services to support athletes, regardless of age and ability.

We specialise in the treatment and rehabilitation of sporting injuries. However, the scope of practice is not limited to sporting injuries alone; we treat musculoskeletal injuries of any origin; whether it’s chronic or occupational in nature. Our very experienced team of Physiotherapists and Sports Therapists have an established record of working with athletes of all levels, ranging from international athletes through to recreational sportsmen and women.
**Treatment**
We can offer up to date treatment for sports and work related musculoskeletal conditions, such as:
- Back pain/ disc prolapse
- Neck pain/ whiplash
- Joint problems
- Muscle Injuries
- Arthritis
- Work related injuries
- Referred pain, such as sciatica
- Repetitive Strain Injuries
- Tendinopathies
- Post operative rehabilitation

**Rehabilitation**
We provide bespoke treatment and rehabilitation programmes based on the latest scientific research. These can include:
- Peripheral and Spinal Mobilisations
- Manipulations
- Soft tissue mobilisations
- Muscle energy techniques
- Electrotherapy
- Kinesiology taping
- Postural and biomechanical advice
- Sports and remedial massage therapy
- Individually tailored rehabilitation programmes

For an informal chat, please contact one of our team and we can advise on the next step.

**To find out more**
Contact: +44 (0)1243 816057
Email: SPRUclinic@chi.ac.uk
Web: www.chi.ac.uk/spru
Our employability pledge

We understand the importance of ensuring that you have the knowledge, skills and experience to compete successfully in today’s challenging jobs market.

In addition to the work placements and sector specific employability and enterprise modules that many of you will have embedded in your course, we have developed a student and graduate internship scheme.

Our commitment is to make sure that students and graduates from all disciplines who register on the programme, and successfully complete the necessary preparation, have the opportunity to apply for carefully matched internships.

This programme aims to ensure that you will graduate with:
• a focused high-quality CV
• interview and selection centre preparation
• the ability to identify and articulate transferable skills
• experience of a recruitment process
• substantive relevant work experience
• workplace skills

As part of the programme we aim to:
• provide a free matching service to identify the needs and aspirations of both graduates and employers
• identify and promote short-term student employment opportunities with a focus on specific sectors
• ensure that there is a range of opportunities to be provided including internships of both short and long duration.
• sign-posting Chichester graduates to other universities’ internship schemes in their home area, where available.

**Possible Career Options**

• Law and civil service  
• Archival, library and museum work  
• Journalism  
• Teaching  
• Business  
• Heritage management  
• Tourism management  
• Postgraduate study  
• Public administration  
• Graduate recruitment programmes

* Gaining an internship is the result of a competitive interview process with the prospective employer so an internship cannot be guaranteed. The programme is intended to provide a progressive work experience package tailored both to your course and your career aspirations on graduation.*
Our Sports Activity and Research Centre (SARC) incorporates a sports hall and sports dome that is used for basketball, netball, trampolining, badminton, volleyball, cricket, soccer, table tennis, hockey and ultimate frisbee. Additionally, there is a fitness suite, a strength and conditioning room and two seminar rooms.
Staff Profiles

Sports Biomechanics and Research Methods

Dr Mike Lauder
Designation: Head of Department.
Research Interests: Mike is Head of Department for Sport and Exercise Sciences and is the programme leader for the BSc in Sport and Exercise Science. He is a member of BASES Sport and Exercise Biomechanics Interest Group. He has held BASES accreditation for support and has conducted consultancy for the BCU and British Diving. Mike is also an active researcher in the areas of water sports and strength and conditioning. He regularly reviews for Sports Biomechanics, Journal of Sports Sciences and Journal of Biomechanics.

Dr Penny Hudson
Designation: Senior Lecturer in Sport Biomechanics
Modules: Anatomy and Kinesiology, Biomechanics and Performance Analysis in Sport, Independent Project
Research interests: Penny has joined Chichester from the Royal Veterinary College where she completed her PhD on cheetah biomechanics. Her research interests revolve around using animals as inspiration for athletes; particularly in sprint performance. As trampoline coach, she also has an interest in the field of gymnastics biomechanics.

Dr Jason Lake
Designation: Senior Lecturer in Sport Biomechanics, Programme Coordinator for MSc in Strength and Conditioning.
Modules: Introduction to Sports Biomechanics, Biomechanical Techniques, Independent Project.
Research Interests: Jason’s research interests focus on the mechanical demands of the strength and conditioning process. His research papers have recently considered the mechanical demands of kettlebell exercise and factors that influence the load-power relationship in resistance exercise, while ongoing research considers bilateral strength deficits and the mechanical demands of British Army foot drill. Jason completed his undergraduate degree at the university before completing an MSc then PhD in sports and exercise biomechanics.

Dudley Graham
Designation: Senior Lecturer in Research Methods for Sport and Exercise Sciences.
Modules: Researching Sport and Exercise, Scientific Inquiry into Sport and Exercise, Research Methods for Sports Therapy and Independent Project.
Research Interests: Dudley is a member of BASES and his research interests include the biomechanics of cricket, golf and snowboarding. Dudley is a UKCC level 3 cricket coach and is a senior coach for Surrey County Cricket Club.
Dr Beverley Hale  
Principal Lecturer: Learning and Teaching  
Modules: Scientific Inquiry in Sport and Exercise; Researching Sport and Exercise; Independent Study in Sport and Exercise. Beverley has co-authored a statistics book Using Statistics in Sport and Exercise Science Research and is currently working on a second edition. She provides applied statistics support for research conducted within the university, and also in collaboration with colleagues in local hospitals and the Institute of Naval Medicine. Beverley is a Fellow of the Royal Statistical Society and the Higher Education Academy.

Matthew Robins  
Senior Lecturer in Sport and Exercise Biomechanics and Performance Analysis. Programme Co-ordinator for MSc Sports Performance Analysis.  
Module: Biomechanics and Performance Analysis in Sport and Exercise  
Research Interests: Matt’s research interests include; normative performance profiling, coordination profiling, variability of sports performance, biomechanics of basketball shooting and, the application of dynamical systems theory and constraints-based approach to the study of individual and team behaviour.

Dr Neal Smith  
Designation: Senior Lecturer and Field Leader in Sport Biomechanics.  
Modules: Sports Injury & Prevention, Biomechanics Techniques, Independent Project.  
Research Interests: Neal’s research direction examines the biomechanics of non-linear motion sports, with particular emphasis on football. His other areas of research interest involves biomechanics of racket sports, energy transfer in kicking and strength and conditioning. Neal lectures on both the undergraduate programme and postgraduate masters programme, in addition to supervising postgraduate research students. He has also provided sports science support work to athletes from a variety of different sports, including high-board divers in Southampton and has appeared in a recent documentary on Ronaldo. Neal regularly reviews scientific papers of the International Journal of Sports Medicine, Sports Biomechanics, Journal of Applied Biomechanics, and the Journal of Sports Sciences.

Sport and Exercise Psychology

Dr Melissa Day  
Designation: Senior Lecturer in Sport and Exercise Psychology; Programme Co-ordinator for the Sport and Exercise Psychology degree  
Modules: Psychology of Training and Competition, Interpersonal Skills, Psychology of Injury and Rehabilitation.
Melissa is a BASES accredited Sports Scientist and is on the editorial board of *The Sport and Exercise Scientist*. Her research interests include the areas of stress, appraisal, coping and skill loss, psychological trauma in sport (in relation to injury), and disability. She reviews for *Journal of Applied Sport Psychology, Anxiety, Stress, and Coping, and Psychology of Sport and Exercise*.

**Dr Iain Greenlees**  
**Designation: Reader in Sport and Exercise Psychology**  
Iain is a BPS chartered and an HCPC registered sport and exercise psychologist with over 15 years’ experience of consulting with elite and youth performers in sailing, golf, swimming and tennis. Iain is also an active researcher in the areas of person perception in sport, mental skills training in sport, motivation and team dynamics and has produced over 100 articles and conference presentations. Iain’s research featured in a 2011 *Horizon* documentary on the effect of colour on human performance. Iain has served as the editor of the British Psychological Society journal *The Sport and Exercise Psychology Review* and is on the editorial board of the *International Review of Sport & Exercise Psychology*.

**Dr Tim Holder**  
**Designation: Senior Lecturer in Sport and Exercise Psychology**  
Tim completed his PhD at Chichester in 1998 which investigated the sensory information used to acquire and control rapid movements in a fast ball sport. Tim is BASES accredited Sport and Exercise Scientist (Psychology), BPS Chartered and HCPC registered Sport and Exercise Psychologist. He has worked for over 20 years with sports performers and coaches on applying sport psychology principles and techniques. Tim supervises under both the BASES and BPS professional training routes to assist in developing the skills needed to be an applied sport psychologist in others. Tim was awarded a fellowship of BASES in 2011 and is continuing to work with the GB synchronised swimming team after the London 2012 Olympics.

**Dr Philip Kearney**  
**Designation: Senior Lecturer in Sport and Exercise Psychology**  
Modules: Acquisition and Performance of Sports Skills, Cognitive Psychology for Sports Performance, Motor Learning and Control. Philip is a member of BASES and ESAN. His research interests include: fundamental movement skill development, coaches’ use of core principles of skill acquisition, and movement pattern variability. Philip has a strong interest in athletics generally and in the decathlon in particular.

**Dr Ruth Lowry**  
**Designation: Senior Lecturer in Exercise and Sport Psychology**  
Modules: Introduction to Sport and Exercise Psychology (L4), Psychology of Physical Activity and Health (L5); Exercise and Physical Activity Interventions (L6); Psychology of Exercise and Health (M). Ruth is a registered Practitioner Psychologist with the Health & Care Profession’s Council (HCPC), a Chartered Sport and Exercise Psychologist and Chartered Scientist with the British Psychological Society (BPS). Her research interests are in the area of physical activity adoption and adherence including; participation motivation, social support, body image and the role of the environment. She regularly peer reviews for journals including the *British Journal of Educational Psychology, Journal of Sports Science, Archives of Pediatrics & Adolescent Medicine, Health Psychology, Sport &
Paul Robinson
Designation: Senior Lecturer in Sports Coaching Science; Programme Co-ordinator for the Sport Coaching Science Programme
Modules: Analysis of Coaching Practice; Issues in Sports Coaching Science; Work Placement. Paul is an England Hockey Level 3 coach, and a senior coach educator/tutor/assessor and independent verifier for coach education courses and SAQ trainer. Paul also writes coach education programmes for England Hockey, and is an active coach. Paul’s wealth of coaching experience and knowledge of current changes in the coaching profession strongly underpins the coaching curriculum.

Dr Matthew Smith
Designation: Senior Lecturer in Sport and Exercise Psychology
Modules: Group Dynamics in Sport; Social Psychology; Introduction to Sport and Exercise Psychology. Matthew is a member of BPS and BASES and is a HCPC registered Sport and Exercise Psychologist. His research interests include leadership in sport and exercise settings, group dynamics, and person perception in sport.

Dr Rebecca Steer
Designation: Senior Lecturer in Sport & Exercise Psychology (Research Methods)
Modules: Managing the Research Process in Sport and Exercise Psychology, Researching Sport and Exercise, Scientific Enquiry into Sport and Exercise. Rebecca completed a PhD from Bangor University and joined Chichester in April 2012. Rebecca contributes towards the research methods and quantitative analysis teaching in the department and has experience in a range of multivariate analyses. Her research interests involve using self-discrepancy theory to examine perceived body image and associated factors such as social physique anxiety, disordered eating behaviour and exercise adherence.

Sport and Exercise Physiology
Dr Mandy Gault
Designation: Senior Lecturer in Sport & Exercise Psychology; Programme Co-ordinator for Sport and Exercise Science (Physical Activity for Health)
Modules: Physiological Aspects of Physical Activity and Health; Exercise Prescription for Health and Fitness; Physical Activity, Obesity and Diabetes; Cardiovascular Rehabilitation. Mandy is a member of BASES and the British Society for Research on Ageing. She recently completed her PhD on the physiological adaptations of older adults to concentric and eccentric endurance exercise. Her research interests include ageing and exercise, exercise prescription and chronic disease, and exercise-induced muscle damage. Mandy is a competitive sports person, with an enthusiasm for athletics.

Simon Northcott
Designation: Senior Lecturer in Sport and Exercise Sciences
Modules: Physiology of the Exercising Human; Developing & Monitoring Fitness in the Coaching Process, Nutritional Strategies for Sport Performance. Simon’s current research and consultancy interests are linked to the physiology of middle distance running with a particular focus on the young athlete. He is an occasional reviewer for Amino Acids and Journal of Sports Sciences.
Dr Marcus Smith
Designation: Reader in Sport and Exercise Science, Principal Lecturer and Field Leader in Exercise Physiology.
Modules: Health and Fitness Across the Generations; Physiological Monitoring of Training and Performance; Issues in Sport and Exercise Science.
Marcus is a member of BASES, BASES Laboratory Director and formed the BASES Interest Group focusing on weight classified athletes. Current research areas include: investigating the effects of dehydration on brain structure & function, and investigating the physiological demands of playing the drums, having co-founded the Clem Burke Drumming Project in 2008. He regularly reviews for the Journal of Sports Sciences and Journal of Sports Science and Medicine.

Prof Mark Willems
Designation: Professor in Exercise Physiology
Modules: BSc: Physiological Limitations to Performance; Independent Project, MSc: Skeletal Muscle: Structure, Function and Plasticity.
Mark is a Professional member of BASES, a Fellow of the European College of Sport Science, editorial board member of the European Journal of Applied Physiology, the European Journal of Sport Science, Medicina Sportiva, International Journal of Sports Science and Journal of Sports Medicine. He is also international exchange coordinator and postgraduate research coordinator of Sport and Physical Education. His research interests include contraction-induced muscle injury, ageing and exercise, occupational physiology, supplementation and performance, and muscle fatigue.

Dr Stephen Myers
Designation: Reader in Exercise Physiology
Modules: BSc: Training Strategies for Sport Performance; Sport and Exercise in Extreme Environments; MSc: Professional Skills in Applied Occupational and Environmental Physiology.
Responsibilities: MSc programmes Co-ordinator
Stephen is a member of the Physiological Society serving as a Society Representative and has been based at the University of Chichester since 2006 after eight years at QinetiQ’s Centre of Human Sciences leading the Biomechanics, Exercise and Nutrition Group. His research interests include human performance in extreme environments, in particular the maritime environment and high altitude, the latter as a member of the Birmingham Medical Research Expeditionary Society, obesity and molecular markers of protein expression. He reviews for a number of journals including the British Journal of Sports Medicine, Medicine & Science in Sports & Exercise and Ergonomics Sports Therapy

Vicky Davis
Designation: Senior Lecturer and Programme Coordinator in Sports Therapy
Modules: Human Anatomy; Sports Injury Management two; Therapeutic and Clinical Electrotherapy.
Vicky is a Sports Therapist and member of the Society of Sports Therapists and has worked in private practice and with professional and semi-professional football clubs. Her research interests include electrotherapy, manual therapy and the assessment of movement and function.
**Neil Light**  
*Designation: Neil is a Senior Lecturer in Sports Therapy.*  
Sports Injury Management one, Supervisor in the Sports Injury Teaching Clinic and has responsibility for Sports First Aid and Trauma training across the degree programme. Neil is a Chartered Physiotherapist who joined Chichester in November 2012 from Exeter City FC where he held the position of Head Physiotherapist. Prior to this, he has lectured at University of the West of England and the University of Salford. Neil has also held Physiotherapist roles at a number of professional and non-professional football clubs including Gloucester City, Oldham Athletic, Stockport County and Accrington. Neil undertakes private clinical work utilising post-graduate training including Spinal manipulation, acupuncture and functional rehabilitation.

**Iain Littlejohn**  
*Designation: Principal Lecturer and Field Leader in Sports Therapy*  
Modules: Advanced Sports Injury Management; Clinical Placement; Advanced Neuromusculoskeletal Manual Therapy; Neuromusculoskeletal Manual Therapy to the Spine. Iain is a sports physiotherapist and a qualified physical education teacher. He is registered with the Health and Care Professions Council and is a member of the Chartered Society of Physiotherapy, The Society of Sports Therapists and the Musculoskeletal Association of Chartered Physiotherapists. Iain has extensive physiotherapy experience working with athletes and currently co-ordinates the physiotherapy and sports therapy services within the University. He has worked in the NHS, private practice and with Portsmouth, Southampton, Reading, Salisbury and Bournemouth Football Clubs treating and rehabilitating squad players. Iain has also completed an MSc in manipulation therapy. He has a special interest in manual therapy and sports rehabilitation.

**Carolina Mischiati**  
*Designation: Senior Lecturer in Sports Therapy*  
Modules: Rehabilitation and Remedial Therapy; Advanced Sports Injury Management. Carolina is a Sports Therapist and member of The Society of Sports Therapists, and has been based at the University since 2002 following a period of clinical practice. Her research interests include movement dysfunction, functional stability, and the restoration of optimal function.

**Danielle Ritson**  
*Designation: Senior Lecturer in Sports Therapy (Maternity Cover)*  
Modules: Human Anatomy, Sports Injury Management two, Therapeutic Electrotherapy, Independent Project. Danielle is a member of The Society of Sports Therapist and has research interests in minimalist footwear and its impact on the human body, movement screening protocols, pelvis dysfunction. Danielle works in private practice as a Sports Therapist and has experience working pitch side with rugby clubs and providing medical support for multiple day endurance events.