

Lancaster  
University



Undergraduate degrees  
Sports and Exercise Science  
2024

## We study **people**

**We study how they move, how they think, and how they react under pressure. We study how their bodies respond to exercise; from population health, to monitoring elite athletic performance. We examine how exercise is beneficial before surgical procedures, how the menstrual cycle impacts injury susceptibility, and how exercise benefits mental health. We study all this and much, much more.**

Our home is Lancaster Medical School, renowned for the quality of its teaching and its commitment to nurturing its students to really bring out their best. To do this, we have purposely small class sizes where you'll get to know the academic team (and they'll get to know you), and where you'll forge friendships that will last a lifetime.

Our academic team are all leaders in their respective fields of research, and this 'research-led teaching' brings real benefits as you get to learn from and contribute to world-class research from academics passionate about teaching. As well as the Sports and Exercise Science team, you'll be taught your biology modules by our colleagues in the Division of Biomedical and Life Sciences, a department currently ranked 5th in the UK by The Guardian University Guide 2023.

All this will give you both the hard skills of a Sports and Exercise Scientist, and the transferrable skills that will make you valuable to a range of employers. Our graduates have gone on to Master's level study here and in the USA, have been employed by the likes of Manchester United and Manchester City Premier League football teams, and have been employed by leading pharma and allied health businesses.

Studying Sports and Exercise Science at Lancaster University will give you the confidence to take your studies wherever you want.

BSc Sports and  
Exercise Science

**1<sup>st</sup>** in the UK for  
satisfaction with  
the quality of the  
course.

National Student  
Survey 2022

BSc Sports and  
Exercise Science

**6<sup>th</sup>**

in the UK

The Times and Sunday  
Times University  
Guide 2023

Visit our website.





Our students competing against the University of York at Roses 2023. Image by Sports and Exercise Science student Abi Turner.

## Discover **Sports and Exercise Science**

**You will explore the science behind human performance in sports, exercise and health. Using our state-of-the-art equipment, you will gain the skills to capture and analyse physiological and biomechanical data to better understand human performance and activity. You will learn how to act to enhance performance and activity - whether for competition or disease management - and how to provide feedback to an athlete, a patient or member of the general public.**

### Connected

You will benefit from Lancaster Medical School's excellent connections with clinicians, practitioners, and professionals working in both the health and sports domains, whilst gaining experience of working with athletes and members of the wider community. The

placements that our students can apply for come about directly through the relations between our academics and industry.

### Professional

From the outset, our programme is built to prepare you for your professional life post-graduation. You'll learn all aspects of laboratory health and safety, and risk assessments, essential skills for entry into either a Clinical or Sports Science setting. Through your Sports and Exercise Science training, you will learn transferrable skills like presentation, communication and interview skills.

### Choice

In your second year, you can begin to tailor your degree by choosing to study either Exercise Medicine (health performance, where you will learn exercise prescription and optimising health) or Sports Medicine (athletic performance for any number of elite sports). Options in your third year allow you to continue with your chosen direction, or widen your studies by mixing optional modules.

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)

## Meet our students: **Poppy**



### Why did you choose Lancaster

#### University?

I was drawn in by the Sports and Exercise Science degree being run through the Medical School, and I liked how the degree had small class sizes – there weren't many people on the course and the lecturers seemed really knowledgeable in their respective research areas, and really supportive and really interested in us.

### Did you take part in any Societies?

I do. I'm on my college netball team and I trampoline for the University. Doing that has given me the best network of friends. I would say getting involved in societies is really important. Even if you've never done a sport, or whatever else you might like to try before, just do it: You'll meet so many new friends; people who are interested in the same things as you.

### How has studying at Lancaster prepared you for this new challenge?

I'm quite an anomaly! Most of my new cohort have come from a Biomedicine background, but I want to break the lazy stereotypes about Sports and Exercise Science. I have knowledge on exercise prescription and optimising health, communication with patients, and experience from my time at Royal Preston Hospital and Alder Hey where I did the research for my dissertation. In all, the programme has prepared me for this in so many ways.

**Poppy graduated in 2022 with a First-class honours degree and was a recipient of the prestigious Chancellor's Medal. After a break spent travelling, she began postgraduate MSc Physician Associate studies at Manchester University in January 2023. A Physician Associate is a Medical Associate profession trained in the key skills to work alongside a doctor.**

### Why did you choose to study Sports and Exercise Science?

I've always been interested in science – I'm scientifically-minded I suppose – but I've also always been really into my sports. For me it was just the perfect combination, applying science to sport. And with it being in the Medical School, I was always really interested in the medical side of sports science, so again, it was a perfect combination for me.

## A **career** in the making

### Sports and exercise science contributes 147,300 jobs to the UK workforce.\*

For every £1 that students invest in their education in sports and exercise science yields £5.50 in higher future wages.\*

A sports and exercise science graduate will earn £667,000 (not adjusted for inflation) more in earnings across their working life compared to if they had a Level 3 education (equivalent to A levels).\*

\* *Sport and Exercise Science Education. Impact on the UK Economy (2019).*

A BSc (Hons) Sports and Exercise Science from Lancaster University will open doors to a career in the sports industry or beyond. It could lead to employment in the private and public sectors, including the NHS, local authorities, national sporting associations, sports governing bodies, education, professional sports clubs, public sports and recreation facilities, and the community.



### Potential roles

(some may involve additional study):

- + Exercise physiologist (average base pay £25,566\*\*)
- + Sports psychologist (average base pay £47,288\*\*)
- + Strength and conditioning coach (average base pay £29,000\*\*)
- + Personal trainer (average base pay £29,930\*\*)
- + Performance analyst (average base pay £37,722\*\*)
- + Sports nutritionist (average base pay £40,932\*\*)
- + Sports Scientist (average base pay £31,977\*\*)
- + Physician Associate (average base pay £43,482\*\*)

Whatever your career aspirations may be, or even if you're still not quite sure, we're here to support you reach your goals. Tutorials and workshops on career planning are integral parts of your degree. You will undertake a module in employability skills, giving you excellent preparation for applying to graduate-level jobs and graduate schemes, and our dedicated Careers Service team are here to help you every step of the way. From CV writing to interviews and assessment centre preparation, they are able to offer you tailored and personalised support. What's more, they offer lifelong careers support to our graduates so, if you need us, we will always be here to help.

\*\*All salaries taken from [glassdoor.co.uk](https://www.glassdoor.co.uk) and correct at 17 May 2023

## Placements

### A placement or internship is a great way to gain work experience and a valuable addition to your CV. Erin (Class of '22) undertook her placement with Burnley FC, working alongside their Sports Science team.

"During my third year, I had a placement with Burnley FC. This came about because one of our lecturers works really closely with the football club academy and was able to get two places for students to work with them over the Season. We had to put an application in and were interviewed and I was one of the successful applicants. Over the summer holiday, the placement was full-time (four or five days a week) and was one or two days a week through term-time, and I did it alongside my studies. We worked with the under-18s and under-23s, helping the Sports Science team. We did everything from hydration testing to load monitoring and data analysis. It was an amazing experience. It was so cool to see how a Premier League football club worked from the inside.

Personally, I was really interested in data analysis so I did their post-match and post-training data analysis, exporting from their



trackers and importing into the monitoring system. Some players have to hit certain numbers (an injury prevention system), and if they don't hit their high speed running or sprint distances, we would run some top-up exercises with them, but we'd help out wherever we were needed. In the mornings we might check fatigue markers, or help out in the gym, it was an eclectic mix of things we learned.

We did get to go to matches, which was great, but the training was where we get to put what we're learning into practice.

It was just a brilliant experience to be learning from the Sports Scientists at a Premier League side\*, for me especially because my ultimate goal is to work in elite women's football."

Erin is currently at Lancaster University undertaking an MSc by Research in Medical Sciences focussing on elite Women's Football with Manchester United.

\*Erin's placement was over the 2021/22 season.



## World-class facilities

### Human Performance Laboratory

The Human Performance Laboratory (HPL) is where the major part of your practical studies will take place. This is fully equipped with research-grade equipment to monitor and test a range of human performance markers. The Biodex Isokinetic Dynamometer we have is the same as you find in a Premier League football club; our cycling ergometers and Cortex Gas Analysers, and treadmills are exactly the same as you would use in elite performance training or any of a number of clinical settings.

### Life Science Laboratories

Our life science teaching laboratories are exactly what you'd expect from a top university. In your first year, you will use these during the practical elements of Molecules of Life and Cell Structure and Function, taught by colleagues from the highly-ranked Division of Biomedical and Life Sciences.

### Strength and Conditioning Room

Our purpose-built Strength and Conditioning Room provides a workout space full of high specification conditioning equipment. You'll have the opportunity to train, or train others to a high level of performance, in year one module Exercise Prescription.



For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)

## Meet the team

You will be taught by Lancaster Medical School's research-active academics with expertise across the range of Sports and Exercise Science disciplines, plus specialists ranging from bioscientists and clinicians, to sports nutritionists and public health experts.



### Dr Bob Lauder

#### Director of Sports Science

Bob's research is focused on markers of long-term joint disease and dysfunction arising from damage and ageing. Joints, especially the knee, can be subject to damage which is more common in some athletes as a consequence of injury. However, while some injuries can be resolved, others can lead to osteoarthritis up to 20-years after the injury; his research has been to identify those at risk of this long-term pathology.



### Dr Sarah Powell

#### Teaching Fellow in Sports and Exercise Science

Sarah is interested in science communication and public engagement. How best to communicate sports and exercise science research to youth athletes, parents, school children and the public. Her work includes the role science communication plays in raising public awareness, understanding and interaction with sports and exercise science, and how these benefit both sports performance and public health.



### Dr Tim Barry

#### Teaching Fellow in Sports and Exercise Physiology

Tim's interests are focussed on applied sport. He has presented at the World Congresses of Science and Medicine in Cricket on the role of spinal shrinkage and curvature as risk factors for injury in fast bowlers. He is also researching the use of new LIDAR technology to measure change of direction in Premier League footballers. His Sport Science consultancy business helps sport clubs develop strategies for research and development.



### Dr Hannah Jarvis

#### Lecturer in Biomechanics

Hannah is a Lecturer in Biomechanics with the Sport and Exercise Science team at Lancaster University. Her work focuses on how a disease or injury affects the ability to walk, specifically in young adults who have had a stroke and individuals with limb loss (amputees). She has competed to international level at mountain running and represented Wales 21 times.



### Dr Kate Slade

#### Lecturer in Sports Psychology

Kate's research focuses on combining psychology with physiology and neuroscience. She is really passionate about ageing research and the conditions that affect us as we age, specifically hearing loss and how this might relate to how we function as we get older. She is also interested in when and why we invest our mental effort, specifically in listening and communication.



### Dr Chris Gaffney

#### Senior Lecturer in Integrative Physiology

Chris's research seeks to understand the basic physiology and chemical reactions (metabolism) that underpin disease, health, and athletic performance. His research encompasses molecular work using cells and the model organism *C. elegans*, through to human-based trials. His current work investigates the impact and mechanisms of physiological stress imparted by ageing, surgery, and spaceflight.



### Dr Michelle Swainson

#### Lecturer in Physiology

Michelle is interested in the associations between physical activity and cardiovascular disease to identify at-risk individuals in both the general population and retired athletes, as well as evaluating the role of exercise-based cardiac rehabilitation in patients following a cardiac event or intervention. Alongside this, Michelle is a key author in the use of dual-energy x-ray absorptiometry (DXA) technology to measure visceral fat as an indicator of obesity, and currently researching the associations between DXA-derived visceral fat and cardiovascular disease risk.



### Dr David Tod

#### Lecturer in Sports and Performance Psychology

David has worked as a sport psychologist in professional sports including football, rugby, golf, and with Olympic athletes. These experiences inform his teaching in sport and exercise psychology where he enjoys helping students learn how to help athletes and clients. David's research focuses on professional development, and he explores what makes an effective sport and exercise scientist.



### Dr Philip Nagy

#### Teaching Associate in Sports and Exercise Science

Philip's work lies in sport and exercise biomechanics. His specific interests focus on the application and synergy of biomechanics in identifying athletes at increased risk of injury, used to inform injury prevention and reconditioning practices. He has worked with a range of athletic populations including cricket fast bowlers, soccer players, and most recently, female classical dancers.

## Why I loved Lancaster



**We caught up with recent graduate Jo to find out what she enjoyed most about studying Sports and Exercise Science at Lancaster and what tips she would give to those currently applying.**

**Looking back at your time at Lancaster, what was your favourite part of the course?**

My favourite part of the course was definitely getting so much lab time all throughout the three years as I learn so much better in a hands-on capacity and so this made my studies so much more engaging and enjoyable for me. I also loved studying the Sports Medicine module in my second year as this was so specifically geared towards what I want to pursue as a career and gave me a great taste of what kind of work I might get to do later in life.

**What initially got you interested in sports and exercise science and what motivated you to study it to degree level?**

I've always loved playing sports throughout my childhood and school life and as I got older I got more and more interested in the science and specifics behind each sport at an elite level and so when I knew that there was a university degree which allowed me to further this knowledge and interest in a variety of areas, I knew that I wanted to pursue it as my degree.

**What advice would you give to somebody who is considering studying Sports and Exercise Science?**

Definitely give it a go as it is a subject that is so widely applicable to everyday life. You don't need to be an elite sports person to study Sports and Exercise Science it really is open to everyone with an interest in the area, it also gives so many possibilities to enter the area of public health or to go into sports and so leaves your options really open for whatever specialism you find an interest in. I have loved my time at Lancaster and would recommend it to anyone thinking about applying, particularly to the Sports and Exercise Science course as the academic staff are so welcoming and helpful throughout your time and genuinely care about each student they have and want each of us to perform to our best ability.

**After completing her Master's in Exercise Science and Kinesiology (Biomechanics) at the University of Michigan (USA), Jo is now studying for a PhD in Biomechanics at Liverpool John Moores University.**



Our students competing against the University of York at Roses 2023. Image by Sports and Exercise Science student Abi Turner.

## Sport at Lancaster

**We are passionate about sport. Lancaster University offers a comprehensive range of sporting options and at levels ranging from beginner and recreational to elite.**

With nine colleges, there are always opportunities for competitive sport. Our college leagues range from netball to football, from basketball to rugby, from athletics to tennis. The University competes in British Universities and Colleges Sport (BUCS) across the full spectrum of sports, allowing you to really push yourself to excel at the highest levels. And we are home to Roses, the largest inter-university sports competition in Europe, held annually against our long-time rivals, the University of York.

Our facilities continue to attract investment. We've just opened a new sports hall bringing the number to four. As well as that our facilities include:

- Strength and Conditioning Suite
- Climbing wall
- 100 station gym
- Badminton courts
- Swimming pool
- Squash courts
- Tennis courts
- Netball courts
- Multi-use games areas: for 5-a-side, basketball, etc.
- Floodlit synthetic grass pitches
- Rugby pitches
- Association Football pitches
- Crown bowling green
- A boathouse just a couple of miles away on the River Lune.

[www.lancaster.ac.uk/sport](http://www.lancaster.ac.uk/sport)

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)

## Meet our students: **Reuben**



**Reuben is a third-year student. He is a keen athlete, representing the University in athletics and rock-climbing.**

### What made you choose your degree?

I was drawn to the course at Lancaster after undertaking a gap year post A-Levels. For me, finding an environment and community that I could connect with was key, as I had missed this during my gap year. The course at Lancaster offered just that, a friendly, small and like-minded cohort of students and tutors. I was coming into the degree from a background working in the outdoors so the mix of both public health orientated modules and sports performance modules was a big draw for me. It opens so many doors and avenues of interest and exploration.

### Outside of your degree studies, are you a member of any societies or sports teams?

Lancaster is great for societies and sports

teams. I'm an exec member for the athletics club and compete for the climbing team, as well as this I have loved going along and being very bad at ballroom dance classes and Indian dance workshops throughout my time at Lancaster. For the competitive people out there all the sports teams I have trained with offer focused and dedicated training with groups, and top-level competitions and trips to take part in. However, the best element to all of these clubs is the people I have met and the friendships I have built. Arriving at Lancaster knowing no one, the clubs were a great way to engage with the community. It's through these different clubs that I met my amazing girlfriend, crazy house mates, now work colleagues and best mates.

### How would you explain what Sports and Exercise Science is to someone thinking of studying it at university?

Sports and Exercise Science is a way of thinking and communicating with the world. Anatomy, VO<sub>2</sub> testing and blood samples are of course all covered and studied in great detail on the course but for me, what the degree really gives you is the ability to understand and communicate what you are finding out and how that can be used in the academic world, in sports performance, and in public health. As an example, I now work as a fitness instructor at the university gym. Each week I run two group circuit classes lasting an hour (brutal I know!) For each session I get about 30 clients in age from 20 to 65 all training together. What the degree has allowed me to do is be able to adapt my sessions accordingly to suit this variety of people all with different fitness levels, goals and abilities. Being able to motivate them, listen and learn from them, have a laugh and provide great training are all skills essential to my profession and are all skills which I have developed through my time at Lancaster.



## Meet our students: A day in the life

**Ben graduated in 2022, but before he did, we caught up with him to find out what a typical day in first-year looked like for him, and for any advice he has.**



No two days were the same but a typical one would start early for me because I wanted to head down to the gym for 7am and get it out of the way before the day started properly. I lived in County College in first year which was probably a ten-minute walk from the gym and the Human Performance Laboratory (which are in the same building). I might have a morning class down there, but especially in first year, I would have lectures in the Biosciences building which is up on the main campus. Depending on the day, I'd have one or two lectures in the morning which would take me through to lunchtime. Then we (the Sports and Exercise Science class) would descend on one of the college bars for lunch and to play some pool or table tennis before afternoon practicals and laboratory work. Those could last anywhere up to four hours depending on what we were doing. First year Biosciences classes were really good but they were tough, especially for those of us that hadn't done A level Biology but they were really important to get us talking in that scientific language.

In my first year, I typically had six to eight hours a day of contact time, but everything was usually done by five. After that, I might hang out with classmates for a bit but then I'd go home to get some food before heading to American Football training. I probably trained three times a week in first year. Training would be done by ten, and that was the day.

I do have some advice to give to incoming first years: You often find out what your coursework will be pretty early on, and so, when you do find out, start it. Even if it's just writing the intro, or doing some reading around the topic, because time goes faster than you think it will and so just start it as soon as you can.

Also, print off the lecture slides. There's usually loads of information on the slides and it can be difficult to get it all down in your notes, but if you have them printed off before the lecture then you can just annotate them as you go.

Finally, get involved in a society. For me, it's been American Football but it doesn't have to be a sport. It just gives you friends and it's great to be a part of something. I have a friend who goes to the Baking Society, so it can be literally anything!

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)



# BSc (Hons) Sports and Exercise Science

## Year One

**In your first year, you will begin to explore the science behind human performance in sports, exercise and health through a broad range of core modules.**

### Core modules

#### Becoming a Sports and Exercise Scientist

Learn about the important role of sports and exercise science in public health, disease management, elite performance, and recreational sports and activities.

#### Cell Structure and Function

An introduction to the structure and function of prokaryotic and eukaryotic cells.

#### Concepts in Sports and Exercise Psychology

How does a tennis player fight back to win the match? Why do sprinters visualise a race? Examine theories of behaviour change and the cognitive (perception, anticipation and decision-making), psychophysiological and behavioural indicators of elite or expert sport performance. Develop your entrepreneurial skills in developing a marketable and credible sport psychology consultancy company.

#### Assessing Technologies in Sports and Exercise Science

Examine the explosion of digital technology used in sports and exercise science with a critical eye. Learn about the types and quality of data, and how we can use that data to improve desired outcomes for the users.

#### Essentials of Sports and Exercise Physiology

Get to grips with human physiology in the context of sports and exercise - how the human body works and responds to exercise and sporting activity.

#### Exercise Prescription

Learn the theory and research surrounding exercise programming, training principles and techniques. Hone your skills in design, individualisation, and progression of a programme.

#### Fundamental Anatomy

You will learn the anatomical terminology and science behind the structure and function of the human body. Journey through the nervous, musculoskeletal, cardiovascular and respiratory systems, learning the detail of each as you go.

#### Hormones and Metabolism

Learn the functions of several endocrine (hormone-producing) glands in lectures and workshops, such as the pituitary, thyroid, and adrenal glands. You will then explore the underlying chemistry behind what makes exercise possible, our metabolism.

#### Introduction to Nutrition

Recognise the impact of foods and fluids on human biochemistry, and learn how to calculate energy requirements and understand how this differs across different activities and populations.



#### Molecules of Life

Explore the chemistry of some of the most important molecules to life, including water, nucleic acids, carbohydrates, proteins and lipids.

#### Principles of Biomechanics

Understand fundamental Biomechanics concepts regarding how and why the human body moves in the way it does. More importantly how these concepts are applied and help us evaluate and improve different sport and exercise activities as well as human movement.

#### Professional Practice I

Gain the academic knowledge, skills and values to progress in the sports and exercise sector. Explore the principles of experimental research design and data analysis and become familiar with forms of statistical analysis. Working collaboratively with peers, you will develop the key skills required for sound academic practice with a focus on employability.

#### Public Health Challenges

Engage with the public health challenges that directly relate to sport and exercise science, such as obesity, physical inactivity and ageing with a focus on health promotion. You will develop a public health initiative and develop your public-facing science communication skills.



Students at the Manchester Institute for Health and Performance. Image by Sports and Exercise Science student Abi Turner.

BSc (Hons) Sports and Exercise Science:

## Year Two

**In your second year, you begin to tailor your degree to your own interests or career aspirations by choosing to study an optional module in either Exercise Medicine (health performance) or Sports Medicine (athletic performance).**

### Core modules

#### Biomechanics II

Explore in more depth how muscle performance affects our daily life, whether this is being able to walk to the shops or to achieve a personal best in a competition. You will learn how to assess performance in both laboratory and field settings, and how to interpret the data in a meaningful way.

#### Current Debates in Sports and Exercise Science

Using an evidence-based approach, discuss and debate current issues and 'hot topics' across sport and exercise science. Work collaboratively to present, defend and critique during live debate showing your critical thinking and presentation skills.

#### Physiology and Metabolism

Focus on the measurement and evaluation of physiological responses to exercise and related environments. You will delve deeper into energy systems and metabolic processes and find out more about the determinants of exercise performance, fatigue and recovery.

#### Research Methods and Statistics

Gain the knowledge and skills necessary for research, including how to identify different types of data and how to select appropriate statistical tests. You will explore approaches to the analysis of different types of information, including text and questionnaire responses. This valuable experience is essential for a successful career in sports science and is highly translational to alternative careers where statistical analysis is required.

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)

#### Sports and Exercise Psychology

Understand and apply needs analysis tools and methods to provide evidence-based psychological profiles and recommendations for interventions. Learn the technical, theoretical and applied skills to examine a range of athlete psycho-emotional profiles and needs and develop interventions to support athletes and exercise participants to thrive. Examine the role of the sports psychologist and the entire athlete consultancy process.

#### Professional Practice II

Increase your employability through a range of professional development opportunities in both sport and health domains. For example, act as a sports scientist for a University sports team. You will start to build a portfolio and develop your professional profiles that will set you up well for applying for jobs upon graduation.

### Optional modules

Choose either Exercise Medicine or Sports Medicine.

#### Exercise Medicine

Learn about the role exercise plays in the management of risk factors associated with heart disease, such as high blood pressure. Discover how exercise can delay issues with bone health, such as load-bearing activities for osteoporosis. Gain insights into the pathophysiology, medications and exercise prescription across a wide range of conditions. Develop an adapted physical activity programme and engage with real-life patients to understand real-life drivers and challenges.

#### Sports Medicine

Develop your knowledge of the injuries and pathologies present within elite sport, and examine prevention and treatment strategies for these conditions. Assess sports injuries and how to monitor athletes who may be at risk through overtraining or other underlying pathologies. Examine the performance benefits, and long-term consequences, of ergogenic aids, and the growing use of therapeutic use exemptions (TUE's) within sport.



*We keep our degrees under constant review, and also regularly introduce new modules. In any academic year, the modules offered and course structure may differ slightly from that presented here.*



Our students competing against the University of York at Roses 2023. Image by Sports and Exercise Science student Abi Turner.

BSc (Hons) Sports and Exercise Science:

## Year Three

**In your third year, you will make a unique contribution to sports and exercise science research and undertake a research project on a topic of your choosing. You will also finalise your professional practice programme by delivering sports and exercise science-based communication to a public audience.**

Core modules will cover advanced concepts within sports and exercise science. You will choose two modules, from a choice of three, in the subjects of physiology, biomechanics and psychology.

You will also have the opportunity to select an optional module in areas such as maximising elite performance or optimising health outcomes.

### Research Project

A crucial part of your degree is your final year project, during which you'll have the opportunity to work with SaES researchers to undertake your own research project. You'll be guided in doing this, and you'll be able to apply all of the knowledge and skills you've developed so far. It will allow you to build on your research and time-management skills, as well as your presentation and team-working skills. You may find yourself analysing warm-up strategies to prevent injury, developing effective training and nutritional approaches for high-performing athletes, or assessing the effects of exercise for enhancing cardiovascular health.

### Advanced Physiology

Explore how the body responds in challenging environments and in response to other stressors such as disease. Study how physiology is disrupted in extreme environments which might include thermal stress, altitude, G-force, or during spaceflight and what can be done to mitigate any effects on exercise performance in extreme environments. We will also explore how exercise can be used as an effective therapy to improve patient prognosis in different disease states.

### Applied Sport, Exercise and Performance Psychology

Critically explore principles of Sport, Health and Performance psychology theory and practices in different applied contexts including sport, business and military environments. Gain insights into real-world applications of psychological processes, techniques and tools. Examine how sports, health and business organisations can thrive in times of adversity and change. Consider the nature of Health Care professionals' training pathways and learn how to measure psychological processes to support best practice in a range of professions.

### Biomechanics III

Take an in-depth look into the mechanics of force generation and how we can increase the quality of our measurements, as well as a more advanced approach into applied biomechanics work, through e.g. strength diagnosis. You will enjoy the 'hands-on' approach used, the ability to contribute on aspects of how you will be assessed as well as taking ownership of a project answering an interesting question.

### Maximising Elite Performance

This module has a strong applied, sport performance-related focus and covers topics that require the input of multiple sports and exercise science disciplines. You will have the opportunity to obtain an understanding of how a team of professionals work together to achieve maximum performance. You will gain an understanding of the challenges facing the sports and exercise scientists working in the field, and will be introduced to innovative ways of communicating with colleagues and athletes.

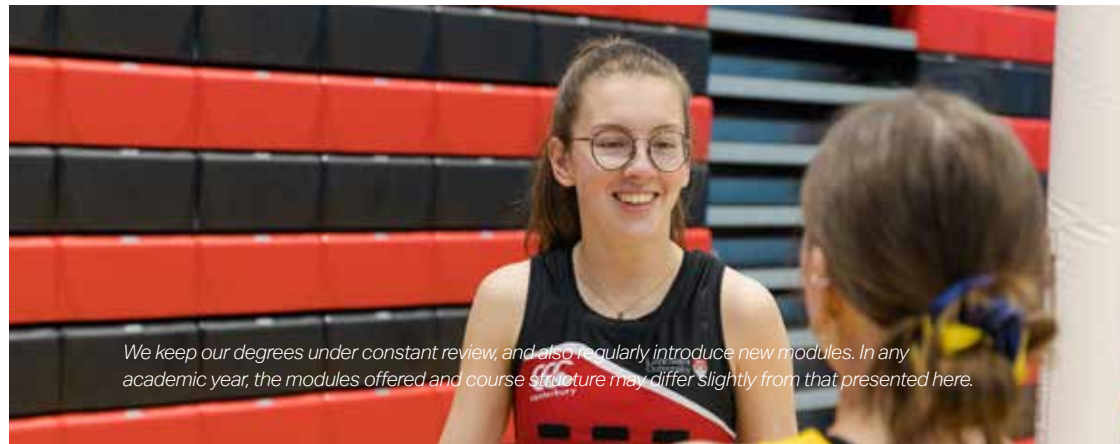
### Optimising Health Outcomes

Equip yourself with the knowledge and skills required in an ever-growing employment field, to optimise health outcomes. You will apply aspects of public health, exercise medicine and learn how to implement real-life tools in the design and evaluation of health interventions for the general public and patient groups.

### Professional Practice III

In this highly engaging module you will discover and develop skills in science communication: informing, educating and raising awareness of sports and exercise sciences with the public.

The skills, knowledge and values gained will culminate in delivering sports and exercise science communication to a public audience.



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## BSc (Hons) Sports and Exercise Science (Study Abroad)

**BSc (Hons) Sports and Exercise Science (Study Abroad) is a four-year programme of study. You will spend your third-year at one of our partner universities.**

We have partner universities in Europe, the USA, Canada, Mexico, Australia, New Zealand, and Asia offering opportunities to immerse yourself in another culture.

BSc (Hons) Sports and Exercise Science (Study Abroad) is structured such that year one and year two follow the same structure as BSc (Hons) Sports and Exercise Science. Year three is then spent at one of our partner institutions where you will study modules that complement your studies at Lancaster. Your fourth year then follows the curriculum of year-three of BSc (Hons) Sports and Exercise Science.

See pages 18 - 23 for details.



**Lauren used the Study Abroad opportunity to spend a year at the University of Wollongong, just to the south of Sydney, Australia.**

"I've always had a desire to go and live and study in another part of the world, and to meet like-minded people at the right time - people who were also studying abroad. It was a big leap, travelling to the other side of the world, and I was homesick for a week or so but it was absolutely amazing.

Wollongong the city is about the size of Lancaster and the university is only five minutes from the beach. You could go for a swim before breakfast, and I had a million people offer to teach me to surf!

I studied modules in Physiology and Exercise Science, and those credits were then transferred to my Lancaster degree.

After my studies were done, I stayed on to do some travelling with the friends I'd made there. I'm still close with them and one is due to travel to Lancaster to see me here. I really can't recommend it enough - the experience was really life-changing."

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)



Photographs are student's own.



For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)

## Teaching, learning and assessment

Your learning will take place in various environments such as lectures, classroom-based workshops and seminars, computer-based sessions with specialist software, and in life science laboratories and our Human Performance Laboratory.

You will engage in lectures, interactive workshops, online forums and even a focus group with patients.

You will be taught by Lancaster Medical School's research-active academics with expertise in sports and exercise science, plus specialists ranging from bioscientists and clinicians, to sports nutritionists and public health experts. Guest speakers will also contribute.

A broad range of assessment methods will be used throughout the degree. In your first year, your knowledge and skills will be assessed by online weekly tests, often multiple-choice, which will help you to spot any gaps in your learning and to feel good about the knowledge that you have already secured.

Written assignments might include the production of a dietary analysis report or a critical review. You will also participate in online forums, group presentations and debates where you will present your side of the argument with a partner. Traditional written exams are also used to test knowledge.

In your third and final year, you will make a unique contribution to sports and exercise science research and undertake a research project on a topic of your choosing. You will also finalise your professional practice programme by delivering a sports and exercise science-based event.

*We keep our degrees under constant review, and also regularly introduce new modules. In any academic year, the modules offered and course structure may differ slightly from that presented here.*

## Entry requirements for 2024 entry

### A level: AAB

#### Required subjects:

A level grade B in one science from the following: Applied Science, Biology, Chemistry, Further Mathematics, Life and Health Sciences, Mathematics, Physical Education, Physics, Psychology, Sports Science.

International Baccalaureate: 35 points overall with 16 points from the best 3 Higher Level subjects, including 6 in one Higher Level science from the following: Biology, Chemistry, Mathematics, Physics, Psychology, Sports, Exercise and Health Science.

BTEC: Distinction, Distinction, Distinction in Applied Science, Sport and Exercise Science, or Sport: Performance and Excellence.

GCSE: Mathematics grade B or 5, English Language grade C or 4.

IELTS: 6.5 overall with at least 6.0 in each component. For other English language qualifications we accept, please see our website: [www.lancaster.ac.uk/study/international-students](http://www.lancaster.ac.uk/study/international-students)

#### Other qualifications

We welcome applications from students with a range of alternative UK and international qualifications, including combinations of qualification. Further guidance on admission to the University, including other qualifications that we accept, frequently asked questions and information on applying, can be found on our general admissions webpages: [www.lancaster.ac.uk/study/undergraduate/admissions](http://www.lancaster.ac.uk/study/undergraduate/admissions)

#### Contact us

Lancaster Medical School  
Lancaster University  
Lancaster  
LA1 4AT

[www.lancaster.ac.uk/saes](http://www.lancaster.ac.uk/saes)

Email: [sportsadmit@lancaster.ac.uk](mailto:sportsadmit@lancaster.ac.uk)

Phone: +44 (0) 1524 592 028



## Open Days

### Open Days are your opportunity to come and meet us in person.

As you go through the process of deciding what you want to study and what kind of university you want to study at, at some point you do need to go and visit them. There is no substitute for coming to visit our beautiful campus, to check out our award-winning accommodation and generally get a feel for the place. You'll find us to be a welcoming, inclusive community with a fully accessible campus.

It's also a chance to meet our academic team and students studying Sports and Exercise Science.

#### Dates for the Open Days are:

Saturday 1st July 2023

Saturday 15th July 2023

Saturday 16th September 2023

Saturday 14th October 2023

Register your interest here:



#### Campus Tours

Outside of the Open Days, we organise regular campus tours to give you a flavour of life at Lancaster. You can book onto Open Days and Campus Tours at [www.lancaster.ac.uk/visitus](http://www.lancaster.ac.uk/visitus)

#### Offer Holder Events

If you receive an offer to study at Lancaster University, you will be invited to come to an Offer Holder Event. These are very different to Open Days, where the focus is more on

getting a general feel for the University. If an Offer Holder Event has one purpose it is to give a snapshot of what it is actually like to be a student studying at Lancaster University. So, your Offer Holder Event might comprise a laboratory practical, a real lecture, a seminar or a tutorial. It will be hosted not only by our academic team, but by our students. Who knows, you might well end up meeting your fellow first-year students for the very first time.

#### Visiting us

Lancaster is very well served by road, rail and air networks and is nearby to major cities such as Manchester and Liverpool. More information about visiting the University can be found at [www.lancaster.ac.uk/travel](http://www.lancaster.ac.uk/travel)

Please note: Visits to campus for Open Days, Campus Tours, and Offer Holder Events may be subject to restrictions if government guidance changes. Please visit [www.lancaster.ac.uk/visitus](http://www.lancaster.ac.uk/visitus) for up to date information.

#### Disclaimer

The information provided in this brochure relates primarily to 2024/5 entry to the University and every effort has been taken to ensure the information is correct at the time of printing in June 2023. The University will use all reasonable effort to deliver the course as described but the University reserves the right to make changes after going to print. You are advised to consult our website at: [www.lancaster.ac.uk/study](http://www.lancaster.ac.uk/study) for up-to-date information before you submit your application.

Further legal information may be found at: [www.lancaster.ac.uk/compliance/legalnotice](http://www.lancaster.ac.uk/compliance/legalnotice)

For more information visit [lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)







Sports and Exercise Science  
Lancaster University,  
Lancaster, LA1 4AT  
T: +44 (0)1524 65201  
**[lancaster.ac.uk/saes](http://lancaster.ac.uk/saes)**

Watch our subject film.

