

## **Programme Specification Document**

Approved, 2022.03

## Overview

| Programme Code       | 30862                            |  |
|----------------------|----------------------------------|--|
| Programme Title      | Science and Football             |  |
| Awarding Institution | Liverpool John Moores University |  |
| Programme Type       | Degree                           |  |
| Programme Leader     | Kevin Enright                    |  |
| Link Tutor(s)        |                                  |  |

## **Awards**

| Award Type            | Award Description                               | Award Learning Outcomes  |
|-----------------------|---|--|
| Alternative Exit      | Bachelor of Science - BS                        | Demonstrate a broad and comparative knowledge of the general scope of the subject, its different areas and applications, and its interactions with related subjects. A detailed knowledge of a defined subject or a more limited coverage of a specialist area balanced by a wider range of study. In each case, specialised study will be informed by current developments in the subject. Demonstrate a critical understanding of the essential theories, principles and concepts of the subject(s) and of the ways in which these are developed through the main methods of enquiry in the subject  |
| Alternative Exit      | Diploma in Higher<br>Education (SW) - SDHE      | Explain and evaluate the principle concepts, theories and measurement techniques within physiology, biomechanics and psycho-social disciplines in a Science and Football context. Explain the principle concepts and theories and conduct analytical techniques within research methods in a Science and Football context Reflect upon and develop personal and professional skills and self-awareness in the context of fundamental employability skills. Communicate information, ideas, problems and solutions in sport and exercise to different audiences. Work independently and with others, as both a team member and a leader, recognising and respecting the values of equality and diversity. Take responsibility for your own learning and continuing personal and professional development through self-appraisal and reflection. Work and act responsible, safely and ethically within sport and exercise science contexts Identify how factors such as race, ethnicity, religion, gender, sexuality, disability, class, socioeconomic status, and citizenship, and intersections thereof, impact within society, and how these contribute to experiences in Science and Football. |
| Alternative Exit      | Bachelor of Science<br>(SW) - SBS               | Demonstrate a broad and comparative knowledge of the general scope of the subject, its different areas and applications, and its interactions with related subjects. A detailed knowledge of a defined subject or a more limited coverage of a specialist area balanced by a wider range of study. In each case, specialised study will be informed by current developments in the subject. Demonstrate a critical understanding of the essential theories, principles and concepts of the subject(s) and of the ways in which these are developed through the main methods of enquiry in the subject  |
| Recruitable<br>Target | Bachelor of Science with<br>Honours (SW) - SBSH | See Learning Outcomes Below  |
| Target Award          | Bachelor of Science with<br>Honours - BSH       | See Learning Outcomes Below  |

| Alternative Exit | Certificate of Higher<br>Education - CHE | Identify the key anatomical, physiological, biomechanical and psycho-social concepts relevant to Science and Football contexts. Identify the key theories and techniques within research methods in Science and Football contexts Explore and develop personal and professional skills in the context of fundamental employability skills. Communicate basic information, ideas, problems and solutions in Science and Football. Work independently and with others, recognising and respecting the values of equality and diversity. Identify learning and continuing personal and professional development needs through self-appraisal. Identify how to work and act responsibly, safely and ethically in Science and Football contexts Identify how factors such as race, ethnicity, religion, gender, sexuality, disability, class, socioeconomic status, and citizenship, and intersections thereof, impact within society, and how these contribute to experiences in Science and Football.   |
|------------------|--|--|
| Alternative Exit | Diploma of Higher<br>Education - DHE     | Explain and evaluate the principle concepts, theories and measurement techniques within physiology, biomechanics and psycho-social disciplines in a Science and Football context. Explain the principle concepts and theories and conduct analytical techniques within research methods in a Science and Football context Reflect upon and develop personal and professional skills and self-awareness in the context of fundamental employability skills. Communicate information, ideas, problems and solutions in sport and exercise to different audiences. Work independently and with others, as both a team member and a leader, recognising and respecting the values of equality and diversity. Take responsibility for your own learning and continuing personal and professional development through self-appraisal and reflection. Work and act responsible, safely and ethically within sport and exercise science contexts Identify how factors such as race, ethnicity, religion, gender, sexuality, disability, class, socioeconomic status, and citizenship, and intersections thereof, impact within society, and how these contribute to experiences in Science and Football. |

| Alternate Award Names |  |
|-----------------------|--|
|-----------------------|--|

## **External Benchmarks**

| Subject Benchmark Statement | UG-Events, Hospitality, Leisure, Sport and Tourism (2019) |
|-----------------------------|---|
|-----------------------------|---|

# Accreditation Programme Accredited by

| PSRB Name Type of Accreditation Valid From Date Valid To | Date Additional Notes |
|--|-----------------------|
|--|-----------------------|

| British Association of<br>Sport and Exercise<br>Science (BASES) | Recognised by the British Association of Sport and Exercise Sciences (BASES) for the purposes of endorsement by the BASES Undergraduate Endorsement Scheme (BUES). |  |  |  |
|---|--|--|--|--|
|---|--|--|--|--|

#### **Programme Offering(s)**

| Mode of Study, Mode of Delivery | Intake Month | Teaching Institution | Programme Length |
|---------------------------------|--------------|----------------------|------------------|
| Full-Time, Face to Face         | September    | LJMU Taught          | 3 Years          |
| Sandwich Year Out, Face to Face | September    | LJMU Taught          | 4 Years          |

#### **Aims and Outcomes**

#### **Educational Aims of the Programme**

Provide an honours-level multidisciplinary study across Science and Football that is in line with professional body requirements. Develop scientific thinking and practice in relation to using and undertaking empirical research in the context of Science and Football. Ensure graduates are aware of issues related to professional conduct, ethics and performance in relation to Science and Football. Provide opportunities for students to engage in peer-to-peer cooperative learning thereby cultivating and participating in communities of practice. Encourage an appreciation and reflection on how protected characteristics (such as ethnicity, gender, religion, sexuality, socioeconomic status), and intersections thereof, contribute to experiences in Sport & Exercise Sciences and what action can be taken to promote a more equitable society. Develop employability skills and mindset throughout the programme that are aligned to the LJMU Employability Strategy. Transform student employability skills, self-awareness, agency and aspirations to be able to make a difference to professional practice through exercise and sport. In addition to the aims for the main target award, the sandwich programme aims to provide students with an extended period of work experience at an approved partner that will complement their programme of study at LJMU. This will give the students the opportunity to develop professional skills relevant to their programme of study, as well as attitude and behaviours necessary for employment in a diverse and changing environment.

#### **Learning Outcomes**

| Code | Description  |
|------|--|
| PLO1 | Understand and critically appraise the study of the context of professional football through the core disciplines of sport science underpinning human structure and function (physiology, psychology, skill acquisition, sociology, biomechanics, performance /match analysis) |
| PLO2 | Plan, design, monitor and execute practical activities using appropriate techniques and procedures   |
| PLO3 | Effectively use knowledge and understanding of health and safety, ethics, and government policy in a Science and Football context.   |

| Code  | Description  |
|-------|--|
| PLO4  | Synthesise and effectively use knowledge and understanding of the culture surrounding professional football and sport science disciplines underpinning human structure and function to monitor, prescribe, and evaluate discipline specific interventions for performance and health enhancement |
| PLO5  | Effectively use knowledge and understanding of health and safety, ethics, government policy, which underpin best practice in science and football contexts   |
| PLO6  | Conduct research and problem-solving using the appropriate methods of acquiring, interpreting, and analysing information appropriate to the study of science and football  |
| PLO7  | Evidence the skills required to monitor and evaluate responses to intervention and sports performance in laboratories and/or professional settings   |
| PLO8  | Critically apply detailed knowledge of research methods in a Science and Football context  |
| PLO9  | Synthesise knowledge in a multi-disciplinary Science and Football context  |
| PLO10 | Research, challenge and critically evaluate data, facts, theories and concepts in Science and Football   |
| PLO11 | Deploy accurately established techniques of analysis and enquiry within Science and Football   |

#### **Programme Structure**

#### **Programme Structure Description**

All modules at Level 4, 5 and 6 are core to ensure appropriate outcomes in relation to the BASES undergraduate endorsement scheme. There are four main discipline strands on the programme: Physiology, Biomechanics, Psychology and Physical Activity and Health. These themes are supported by a Professional Practice strand which culminates in a placement, and a Research Methods strand which culminates in a research project. Study Abroad Students will be offered the opportunity of study abroad at Level 5. Students can choose either Option A or Option B unless they undertake the Sandwich Year, in which case Option B is not available: Option A: replacement of 60 credits of Level 5 with appropriate study abroad. The programme will offer the opportunity of 60 credits of study at Level 5. Students will be enrolled on a 360 credit honours with study abroad programme. A 60 credit Level 5 study abroad module (5017SPS) will normally replace the semester 2 modules on the standard programme. This study abroad should cover the same learning outcomes as the modules being replaced. The modules to be studied in the host institution must be agreed in advance. The Level 5 mean for the final award mark will be calculated based upon the 120 credits at Level 5. Option B: additional study year abroad following Level 5 The programme will offer the opportunity of an additional study year abroad following Level 5. Students will be enrolled on a 480 credit honours with study abroad programme. Of those 480 credits, 120 will be taken via a Level 5 study abroad module (5014SPS). The modules to be studied in the host institution must be agreed in advance. The Level 5 mean for the final award mark will be calculated based upon the 240 credits at Level 5. Sandwich Year The placement year will follow Level 5 and students will be enrolled on a 480 credit honours sandwich programme and take the module 5113SPFOOT (Sandwich Year-Science and Football). The Level 5 mean for the final award mark will be calculated based upon the 240 credits at Level 5. Students who joined the programme prior to September 2022 will follow the previously validated version of this programme.

| Programme Structure - 360 credit points  |          |
|--|----------|
| Level 4 - 120 credit points  |          |
| Level 4 Core - 120 credit points   | CORE     |
| [MODULE] 4091SPS Research Methods 1 Approved 2022.03 - 20 credit points                                |          |
| [MODULE] 4092SPS Exercise Physiology 1 Approved 2022.03 - 20 credit points                             |          |
| [MODULE] 4093SPS Psychosocial Principles of Sport and Exercise Approved 2022.05 - 20 credit points     |          |
| [MODULE] 4094SPS Human Movement Approved 2022.01 - 20 credit points                                    |          |
| [MODULE] 4301SPS Professional Practice in Science and Football 1 Approved 2022.01 - 20 credit points   |          |
| [MODULE] 4303SPS Talent Identification and Development in Football Approved 2022.02 - 20 credit points |          |
| Level 5 - 120 credit points  |          |
| Level 5 Core - 120 credit points   | CORE     |
| [MODULE] 5091SPS Research Methods 2 Approved 2022.01 - 20 credit points                                |          |
| [MODULE] 5092SPS Exercise Physiology 2 Approved 2022.01 - 20 credit points                             |          |
| [MODULE] 5093SPS Sport and Performance Psychology Approved 2022.01 - 20 credit points                  |          |
| [MODULE] 5103SPS Biomechanics Approved 2022.01 - 20 credit points                                      |          |
| [MODULE] 5301SPS Professional Practice in Science and Football 2 Approved 2022.01 - 20 credit points   |          |
| [MODULE] 5302SPS Football Tactics and Match Analysis Approved 2022.01 - 20 credit points               |          |
| Optional placement - 120 credit points   | OPTIONAL |
| Placement Year - 120 credit points   | OPTIONAL |
| [MODULE] 5113SPFOOT Sandwich Year - Science and Football Approved 2022.01 - 120 credit points          |          |
| OR Study Abroad - 120 credit points  | OPTIONAL |
| [MODULE] 5014SPS Study Year Abroad - Science and Football Approved 2022.01 - 120 credit points         |          |

| Optional Study Semester - 60 credit points  | OPTIONAL |
|---|----------|
| [MODULE] 5017SPS Study Semester Abroad - Science and Football Approved 2022.01 - 60 credit points |          |
| Level 6 - 120 credit points   |          |
| Level 6 Core - 120 credit points  | CORE     |
| [MODULE] 6091SPS Major Project Approved 2022.01 - 40 credit points                                |          |
| [MODULE] 6301SPS Football Technology and Innovation Approved 2022.01 - 20 credit points           |          |
| [MODULE] 6302SPS Physical Performance in Football Approved 2022.01 - 20 credit points             |          |
| [MODULE] 6303SPS Applied Psychology of Football Approved 2022.01 - 20 credit points               |          |
| [MODULE] 6304SPS Applied Placement in Science and Football Approved 2022.01 - 20 credit points    |          |

Module specifications may be accessed at <a href="https://proformas.ljmu.ac.uk/Default.aspx">https://proformas.ljmu.ac.uk/Default.aspx</a>

#### Teaching, Learning and Assessment

The programme is delivered with a mixture of formal contact time, directed study and private study. Students are encouraged to develop their learning skills and to become progressively more independent in their learning. Core knowledge and understanding is acquired through a wide range of teaching methods including lectures, seminars, tutorials, laboratory based practical work, online tasks, group work and guided independent study. State-of-the-art laboratories, a sports hall and specialist IT facilities are provided by the School of Sport and Exercise Science and the wider university. Assessment methods, marking criteria and deadlines are specified in advance and supported by formal feedforward sessions. A range of assessment methods are adopted throughout the programme including, examinations, multiple choice exams, individual and group coursework, presentations, reflective assessments, laboratory reports, vivas, practical skill evaluations and research projects. Student employability is central to the structural framework and programme design. The 'Professional Practice' modules at Level 4 and Level 5 were designed to address the core aspects of LJMU's Student Employability, Enterprise & Employment Strategy, while also developing programme specific skills and practices. These are both part-assessed by a portfolio to allow for a diverse range of assessment covering employability and mind-set topics. These two modules also prepare students for the core 'Placement' module at Level 6. In 2021, an 'inclusive curricula team' was formed and this working group successfully secured internal funding to enable student interns to lead an audit of our programmes in relation to decolonising the curriculum, with the support of our academic team. We recognise that a colonial curriculum is an inaccurate curriculum, characterized by an unrepresentative, inaccessible, and privileged nature. Decolonising the curriculum is about being more accurate, more inclusive, and more interculturally responsive. Equity, diversity and inclusion (EDI) is an increasingly important focus for our School (the school also have Athena SWAN bronze status). We recognize that to truly embed EDI into the fabric of what we do, we need to focus our curricula. The curricula are, truly, the heart of our School and involves everyone; all our staff and students. As a project team, we agreed very quickly that this needs to be considered in three ways- i) what we teach, ii) how we teach and iii) how we assess. This process has both provided broader insights into issues around equality, diversity and inclusion within the curricula, both in relation to content and inclusive delivery. Outcomes from this have informed programme development and have led to the creation of a programme-level learning outcome. Furthermore, module teams have audited module content on EDI topics to ensure appropriate coverage of this theme including: (1) a diverse curricula, (2) representation, (3) critical thinking, (4) discussing perspectives, (5) historical context, (6) bias in real world outcomes, (7) active learning, (8) EDI assessment. Ultimately, this has resulted in diversification of our module/programme design, delivery, and assessments. Research activity and research informed teaching is a significant strength within the School. The School was named the 12th best department, 2nd in the UK and the 9th best in Europe in the Academic Ranking of World Universities (ARWU) 2020 for the Sports Sciences subject area, highlighting the School's global research influence. Such level of research has had a big impact on the curriculum design and delivery. Most of the modules on the programme are based on areas of considerable research excellence within the School, for example cardiovascular physiology, clinical biomechanics, exercise metabolism, motor behaviour. Development and assessment of authentic skills has underpinned assessment development. Whilst this is not always possible for all assessment

#### Opportunities for work related learning

The School provides a world class research informed curriculum alongside a structured and focused approach to employability that ensures the programme remains at the forefront of Sports Science degree provision in the UK. Preparation for work related learning is developed in the first two years primarily through the Professional Practice modules where self-awareness, mind-set and skill development are all taught. The formal work-related learning opportunity comes in the Level 6 Placement module where students can source an external placement opportunity in an area of their interest. All these modules have been benchmarked against the LJMU Employability Strategy to ensure graduates develop the relevant knowledge and skills. The placement is supported by an academic supervisor at LJMU as well as a placement supervisor in the workplace. Outcomes and the nature of the assessment are agreed upon with the student and placement provider to ensure a realistic and relevant experience. There is close liaison between the programme team and the Faculty Placement Learning Support Unit (PLSU). The PLSU play a key role in supporting the sourcing, quality assurance and communication with placement providers for both the Level 6 Placement and the optional Sandwich year. The Sandwich Year is an optional year-long, credit bearing work-based learning experience. This takes place in the third year of the programme and is based on a pass/fail assessment submitted at the end of the placement. For sandwich year placements, students primarily selfsource opportunities. All placements are quality assured by Academics and PLSU based on the Placement Learning Code of Practice (PLCoP) processes.

#### **Entry Requirements**

| Туре                                  | Description  |
|---------------------------------------|--|
| International Baccalaureate           | 26 minimum. Offers may be grade specific. A specific science grade may be required.  |
| A levels                              | 112 UCAS points. At least one Sport or Science subject. PE, Psychology and Maths included as Science.  |
| BTECs                                 | An appropriate National Diploma achieved with DDM in a science-related subject.  |
| Other international requirements      | For undergraduate courses please apply through UCAS, applicants will be considered in line with normal entry requirements. International applicants must possess a minimum IELTS (or equivalent) score of 6.0.   |
| Alternative qualifications considered | Applications should normally include GCSE (or equivalent) passes at grade C and above or 4 + on new GCSE structure in English Language, Maths and Science (Chemistry, Biology, Physics or science equivalent). Approved alternative qualifications: Key Skills Level 2 in English/ Maths; NVQ Level 2 Functional skills in Maths and English; Writing and or Reading Skills for Life Level 2 in Numeracy/English; Higher Diploma in Maths/ English; Functional skills level 2 in Maths/ English; Northern Ireland Essential Skills Level 2 in Communication or Application of Number; Wales Essential Skills Level 2 in Communication or Application of Number; Welsh GCSE in Maths or Welsh GCSE in Maths Numeracy. |