Programme Specification Document

Proposed, 2024.02

Overview

Programme Code	36188
Programme Title	Sustainability and Ecology
Awarding Institution	Liverpool John Moores University
Programme Type	Masters
Language of Programme	All LJMU programmes are delivered and assessed in English
Programme Leader	
Link Tutor(s)	Sarah Dalrymple

Partner Name	**Partnership Type**
Centre for Alternative Technology	Validated

Awards

Award Type	**Award Description**	**Award Learning Outcomes**
Target Award	Master of Science - MS	See Learning Outcomes Below
Recruitable Target	Postgraduate Diploma - PD	See Learning Outcomes Below
Recruitable Target	Postgraduate Certificate - PC	See Learning Outcomes Below
Alternative Exit	Postgraduate Diploma - PD	Engage with and take an informed position on advanced levels of theories and practice in relation to the fields of sustainability and ecology. Students will be able to explore, test, identify and apply appropriate research methods and be able to demonstrate appropriate levels of critical analysis, reflection and contextual awareness in a range of modules associated with the field of study.
Alternative Exit	Postgraduate Certificate - PC	Understand the broad concepts of sustainability and adaptation in the context of sustainability and ecology. They will be able to engage with and take an informed position on theories and practice in relation to the fields of sustainability and ecology.

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	Centre for Alternative Technology	18 Months

Aims and Outcomes

Educational Aims of the Programme

The overall aim of the programme is to train postgraduate students so they are able to play a significant role in the development of approaches to the study and application of knowledge in Sustainability and Ecology; in particular to the management of land and natural resources within the context of wider sustainability and adaption to global environmental issues. By their very nature these global environmental issues are complex, and require a holistic awareness of scientific, social, cultural and economic concepts, issues, and theories. Therefore, an interdisciplinary approach is taken throughout the programme and is implicit in the programme aims and learning outcomes. This programme will offer appropriate support to students, so they can continue to build their knowledge, understanding and skills to become independent learners for the future. The specific aims of the programme are:

• To critically reflect upon the consequences, seriousness, and urgency of environmental and climatic change with respect to how these multidisciplinary factors influence the assessment, conservation and management of ecological systems;

• To hone the ability to identify and appraise the complex influences that technical, political, legal, social, cultural and non-cultural factors have on the provision, supply, demand and use of biodiversity and natural resources;

• To develop critical, practical and analytical problem-based learning and transferable skills to in order to make informed decisions in the fields of sustainability and ecology;

• To enable students to extend their capacity for independent study and to make an original contribution to research within the fields of sustainability and ecology; e.g., biodiversity ecosystem services, restoration ecology, ecological assessment, or the social, political or economic contexts of managing land sustainably;

• To develop the self-confidence and ability to act on initiative, to prepare for the rigours and demands of employment or further professional development or postgraduate study in areas related to ecology, environmental management, or sustainability;

• Provide students with a well-developed academic base for further learning /research/ personal and professional development and employment within the fields of ecology and sustainability;

• To develop transferable skills including written and verbal communication, IT, problem-solving, teamwork and time management skills, to prepare the students for leadership in the workplace.

Learning Outcomes

Code	Description
PLO1	Demonstrate a holistic, systematic and sophisticated understanding of the concepts, issues, and theories of sustainability and ecology within the context of environmental, social and economic sustainability (e.g. Consequences and urgency of environmental change on the equilibrium of ecosystems, trade-off between human activities and conservation, ecosystem services, adaptation capacity to anthropogenic or natural disturbances and management of natural resources);
PLO2	Demonstrate a thorough understanding of the logistical issues involved in planning and conducting scientific research and study;
PLO3	Collate and handle data, carry out statistical analyses and modelling where appropriate.
PLO4	Communicate effectively to a wider audience;
PLO5	Make effective use of communication and IT to gather and use evidence and data to find, retrieve, organise and exchange new information;
PLO6	Demonstrate clarity, fluency, and coherence in a variety of written forms and expression;
PLO7	Organise tasks and manage time effectively;
PLO8	Design, investigate, and present an extended and independently-conceived piece of research;
PLO9	Work in a team, identifying individual and collective goals; exercising initiative and personal responsibility when performing roles in a manner appropriate to achieving team goals.
PLO10	Present a sophisticated and integrative appreciation of the influence that technical, engineering, legal, political, social and cultural perspectives can have on the functioning of ecosystems and the management of natural resources;
PLO11	Gain specialist knowledge of sustainability and ecology, including that of behavioural issues surrounding anthropogenic attitudes to biodiversity and conservation;
PLO12	Gain experience in techniques to assess, measure and monitor natural resource use and the impacts on dynamics and functions of ecosystems.
PLO13	Develop and sustain arguments in a variety of written and numerical forms, formulating appropriate questions and using primary and secondary evidence;
PLO14	Critically evaluate methods, analyses, conclusions and relevance from interdisciplinary sources, and where appropriate, propose new hypotheses from congruent argument, of current research and advanced scholarship;
PLO15	Synthesise a clear understanding of the various attitudinal, legal, institutional and ethical considerations and developments associated with sustainability and adaptation in an area of practice;
PLO16	Display a holistic and sophisticated understanding of how knowledge is advanced through research, and produce clear, logically argued and original written work.
PLO17	Analyse biodiversity and ecological restoration practices, in a variety of environments;

Programme Structure

Programme Structure Description

The MSc (180 credits) Sustainability and Ecology is achieved via completion of two 15-credit introductory core modules (7522CATSCI Introduction to Sustainability and Adaption and 7523CATSCI Sustainability and Adaptation concepts in practice), the four 15-credit core modules, two optional 15-credit modules and the 60-credit dissertation module. Students completing the MSc programme full time will complete 120 credits in year 1 of their studies and 60 credits (dissertation) in year 2. The PgDip (120 credits) Sustainability and Ecology exit award is achieved via completion of the two 15-credit introductory core modules (7522CATSCI Introduction to Sustainability and Adaption and 7523CATSCI Sustainability and Adaptation concepts in practice), the four 15-credit core modules plus two other 15-credit modules. The PgCert (60 credits) Sustainability and Ecology exit award is achieved via completion of the two 15-credit introductory core modules (7522CATSCI Introduction to Sustainability and Adaption and 7523CATSCI Sustainability and Adaptation concepts in practice) and two of the following 15-credit modules, 7514CATSCI Ecological Assessment, 7513CATSCI Restoration Ecology and 7506 Ecosystems and Ecosystem Services.

Programme Structure - 180 credit points	
Level 7 - 180 credit points	
Level 7 Core - 150 credit points	CORE
[MODULE] 7520CATSCI Dissertation Approved 2023.01 - 60 credit points	
[MODULE] 7521CATSCI Applied Research Design Approved 2023.01 - 15 credit points	
[MODULE] 7522CATSCI Introduction to Sustainability and Adaptation Proposed 2024.01 - 15 credit points	
[MODULE] 7523CATSCI Sustainability and Adaptation Concepts in Practice Proposed 2024.01 - 15 credit points	
[MODULE] 7514CATSCI Ecological Assessment Proposed 2024.02 - 15 credit points	
[MODULE] 7513CATSCI Restoration Ecology Proposed 2024.02 - 15 credit points	
[MODULE] 7506CATSCI Ecosystems and ecosystem services Proposed 2024.02 - 15 credit points	
Level 7 Optional - 30 credit points	OPTIONAL
[MODULE] 7504CATSCI Cities and Communities Approved 2023.01 - 15 credit points	
[MODULE] 7507CATSCI Sustainable Materials in the Built Environment Approved 2023.01 - 15 credit points	
[MODULE] 7509CATSCI Work-based Project Approved 2023.01 - 15 credit points	
[MODULE] 7503CATSCI Food Systems and Sustainability Proposed 2024.02 - 15 credit points	
[MODULE] 7510CATSCI Sustainable food production: techniques and practices Proposed 2024.02 - 15 credit points	
[MODULE] 7502CATSCI Introduction to the Politics and Economics of the Environment Proposed 2024.01 - 15 credit points	

Module specifications may be accessed at https://proformas.ljmu.ac.uk/Default.aspx

Approved variance from Academic Framework Regulations

Variance

Variance from PG.A4.2 (module-size requirements.) - 15-credit modules permitted. Variance from PGA4.4 (semester credit balance) - A credit imbalance between semesters is permitted. Variances approved 12.01.2024.

Teaching, Learning and Assessment

Teaching and learning will be via interactive lectures, workshops, discussion groups, seminars, presentations, and practical work. Assessments will be written assignments such as essays, project reports and or via presentations and academic posters. Intellectual skills are developed through the teaching and learning programme. Critical analysis and problem-solving skills are embedded in all modules and are taught, developed and practised through debate, workshops, seminars and practical work. Experimental, research and design skills are further developed and practised through a broad range of coursework activities and project work. Written or verbal individual feedback is given on all work submitted. Critical thinking and problem-solving skills are assessed through assignments. Experimental research and design skills are assessed in the dissertation. Practical skills are taught during workshop and practical sessions. Experimental design is taught in the Applied Research Design and Dissertation module and is embedded throughout the taught modules via lectures and workshops, and practical work. Practical skills are assessed via the dissertation and in core modules ‘Ecological Assessment’ and ‘Ecosystems and Ecosystem Services’ as well as in some of the optional modules. Transferable skills are taught, developed and practised through the teaching and learning programme. Numerical and statistical problem-solving skills are taught on the core modules of the dissertation, Applied Research Design, ‘Ecosystems and Ecosystem Services’, ‘Restoration Ecology’ and ‘Ecological Assessment’ as well as in some of the optional modules. Outcomes are assessed through written and oral assessments.

Opportunities for work related learning

The programme offers a specific period of work-related skills in the Applied Research Design (7521CATSCI) and in the Dissertation module (7520CATSCI) such as planning, and managing and completing an independent piece of research. Students have the option of completing a module ‘Work-Based Project’ which is an individual project based within the work-place (7509CATSCI). The use of practitioners from industries in areas such as forestry, or ecosystem services within module teaching will also enable students to learn first-hand about the industry and meet professionals.

Entry Requirements

Type	Description

Alternative qualifications considered	Graduates: Normally entrants to the programme will have at least a second-class degree in a subject appropriate to or compatible with Ecology such as physical geography, environmental science, biology or related topic areas. Students may be admitted with advanced standing through the recognition of credit or the accreditation of experiential or certificated learning within 5 years of the start of study according to the LJMU Recognition of Prior (Experiential) Learning (RP(E)L) policy, document 188 (www.ljmu.ac.uk/about-us/public-information/academic-quality-and-regulations/academic-framework). RE(P)L will be considered in accordance with University regulations. Non-graduates: For applicants not in possession of a good honours degree, the programme leader will take into account relevant professional qualifications and experience. Any participant who does not have a first degree must satisfy the programme team of their ability to study at Master's level (e.g. presentation of a strong portfolio to demonstrate appropriate equivalent skills). For these applicants, individual assessments of their suitability for post graduate level study will be arranged and conducted by the programme team. The team may require evidence to be submitted as part of the assessment process e.g. a portfolio of written and other work; papers presented at conferences, publications; reports and research proposals
Other international requirements	Normally a good degree (2ii equivalent) in a subject appropriate to or compatible with Ecology such as physical geography, environmental science, biology or related topic areas preferred alongside a recognised English language qualification (IELTS score of 6.5 with a minimum of 6 in each category) or Pearson score of 58-64 within 2 years prior to the programme start date (minimum score of 51 in each component for UKVI Purposes).
Undergraduate degree	Normally entrants to the programme will have at least a second-class degree in a subject appropriate to or compatible with Ecology such as physical geography, environmental science, biology or related topic areas.

Extra Entry Requirements