Programme Specification Document

Approved, 2022.03

Overview

Programme Code	35517
Programme Title	Forensic Bioscience
Awarding Institution	Liverpool John Moores University
Programme Type	Masters
Language of Programme	All LJMU programmes are delivered and assessed in English
Programme Leader	Suzzanne McColl
Link Tutor(s)	

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Master of Science - MS	See Learning Outcomes Below
Alternative Exit	Postgraduate Diploma - PD	Engage with advanced levels of theories and practice in relation to the field of forensic bioscience. Identify and apply appropriate research methodologies. Take an informed position in relation to the field of forensic bioscience. Demonstrate personal skills in critical analysis, reflection and contextual awareness in a wide range of modules associated with the field of study.
Alternative Exit	Postgraduate Certificate - PC	Engage with advanced levels of theories and practice in relation to the field of forensic bioscience. Explore and test appropriate research methodologies. Demonstrate appropriate levels of critical analysis, reflection and contextual awareness in focused areas of study.

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	PGT-Forensic Science (2022)

Accreditation

Programme Accredited by

PSRB Name	Type of Accreditation	Valid From Date	Valid To Date	Additional Notes
Chartered Society of Forensic Sciences	The Chartered Society of Forensic Sciences provides an accreditation system for both undergraduate and postgraduate courses in forensic science and related topics. Accreditation is given provided the course content meets with the Society's component standards which provide a quality endorsement of the course.			

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	September	LJMU Taught	1 Years

Aims and Outcomes

Educational Aims of the Programme

The overall aim of the programme is to produce postgraduates who are able to play a significant role in the development of approaches to the study and application of knowledge in the field of forensic bioscience. The curriculum and approach to Teaching, Learning and Assessment aims to meet the challenges of employment in a global society through the development of intellectual, analytical and research skills relevant to this area of study. The specific aims of the programme are: 1. To provide students with specialist knowledge of biological sciences pertinent to forensic science including both theoretical and practical aspects. 2. To enhance students' critical, analytical and practical skills relevant to the modern multidisciplinary forensic industry. 3. To enable students to extend their capacity for independent study and to make an original contribution to research. 4. To enhance students capacity for teamwork. 5. To enhance students oral and written communication skills. 6. To develop those learning, IT, communication and reflective skills necessary to enable students to participate in lifelong learning. 7. To provide students with a high level understanding of the role of the expert witness and relevant aspects of the law under which they may have to work.

Learning Outcomes

Code	Description
PLO1	Demonstrate a thorough knowledge and understanding of the facts, concepts, principles and theories relevant to the broad area of forensic bioscience.
PLO2	Critically appraise laboratory methods and the design of laboratory experiments, their implementation and interpretation of their results.
PLO3	Convey their findings to specialist and non-specialist audiences in an appropriate manner.
PLO4	Collect, analyse and interpret experimental data.
PLO5	Display autonomy in planning, design and execution of experiments.
PLO6	Critically evaluate current research and scholarship in the student's chosen discipline.
PLO7	Plan and execute safely laboratory experiments with an awareness of good laboratory practice (GLP) and control of substances hazardous to health (COSHH) assessment. Consideration of ethical requirements if necessary.
PLO8	Develop the organisational skills to manage resources and time.
PLO9	Communicate effectively by discussions, written materials, use of images and data to make oral, written and poster presentations. Use of IT to enable this effective communication.
PLO10	Collect, record and interpret numerical data.
PLO11	Exercise initiative and personal responsibility.
PLO12	Possess a clear awareness of the professional, moral and ethical responsibilities (including relevant laws, expert witness regulations and current and future constraints) placed on the forensic scientist.
PLO13	Develop an ability to make decisions in complex and unpredictable situations.
PLO14	Critically evaluate current themes and/or insights, at/or informed by, the forefront of the forensic Industry and its related disciplines.
PLO15	Demonstrate a thorough knowledge of the biological organisms and analysis applicable to the area of forensic science.
PLO16	Show originality in the application of knowledge, together with a practical understanding of processes which facilitate the critical evaluation of research, scholarship and methodologies within the area of forensic bioscience.
PLO17	Critically evaluate information and data from a variety of sources.
PLO18	Apply planning, research methodology and analytical skills to an in-depth study of a topic in a chosen field of study.
PLO19	Select the appropriate tools for analysing and presenting complex concepts and ideas, communicating findings clearly.
PLO20	Demonstrate originality in tackling and solving problems.

Programme Structure

Programme Structure Description

The programme is composed of modules with credit ratings of 20 and 60.The programme is offered as a one year full-time course. The taught component of the programme covers a period of seven months (October-April) and the project five months (May-September). The project module has a credit rating of 60 and the remaining 120 credits gained from a menu of core and option modules (all 20 credits). To obtain an MSc., students must acquire 180 level 7 credits. Intermediate awards are Postgraduate Certificate (60 credits) and Postgraduate Diploma (120 credits). These credits must not include the dissertation module. Students who achieve the full 180 credits with an average mark of 70% or above are awarded MSc. with Distinction. Students who achieve the full 180 credits with an average mark of 60-69% are awarded MSc. with Merit.

Programme Structure - 180 credit points	
Level 7 - 180 credit points	
Level 7 Core - 140 credit points	CORE
[MODULE] 7104FSBMOL Bioanalytical Techniques Approved 2022.01 - 20 credit points	
[MODULE] 7105FSBMOL Forensic Bioscience Approved 2022.01 - 20 credit points	
[MODULE] 7106FSBMOL Law and Court Room Skills Approved 2022.02 - 20 credit points	
[MODULE] 7108PHASCI Research Project Approved 2022.01 - 60 credit points	
[MODULE] 7114NATSCI Forensic Research Methods Approved 2022.01 - 20 credit points	
Level 7 Optional - 40 credit points	OPTIONAL
[MODULE] 7101FSBMOL Trace Evidence Analysis Approved 2022.01 - 20 credit points	
[MODULE] 7105NATSCI Taphonomy and Trauma Analysis Approved 2022.01 - 20 credit points	
[MODULE] 7107FSBMOL Wildlife Forensic Science Approved 2022.02 - 20 credit points	

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

Teaching, Learning and Assessment

Acquisition is achieved through a combination of interactive lectures, small group teaching (tutorial),workshops, CAL, seminars, literature reviews, extended essays, portfolios, oral presentations, directed supervisions and project work. Practical skills are achieved by wet and dry practical activities, demonstrations, project work, external visits and seminars (external/internal speakers). The five month project serves to develop knowledge and understanding of concepts and theories applicable to forensic bioscience. The range of assessment types includes a combination of unseen/seen examination papers (essay and interpretative style questions) and coursework in the form of laboratory reports, essays, case studies, oral examination, poster presentation, scientific paper production, e-portfolio, problem solving exercises, and a dissertation thesis. Intellectual skills are developed throughout the teaching and learning programme. Critical analysis and problem solving skills are embedded in all modules and are taught, developed and practised through workshops, tutorials (small group),formative assessment exercises and all forms of project work. Experimental, research and design skills are further developed and practised through a broad range of coursework activities, laboratory work and all project work. Individual feedback is given on all work submitted. Experimental research and design skills are assessed by essays, portfolio, oral presentations, and practical report write-up including the dissertation thesis. Additionally the expert witness statement and oral defence within the law and court room skills module assesses a range of specific practical skills. The assessments are specifically designed to allow students to enhance their transferable skills alongside more specific, programme related outcomes.

Opportunities for work related learning

Students may be offered a research project in a related area of forensic bioscience which may be based within the facilities of a forensic provider or forensic institute both in the UK and elsewhere. All work offers individuals the opportunity to develop their critical reasoning and complex problem solving skills further. Throughout the programme, emphasis is focused on the acquisition of new knowledge and skills that would secure future employment within the area of forensic bioscience using a range of techniques, such as case studies, to deliver work-related information. The Law and Court Room Skills module is particularly work related in its approach.

Entry Requirements

Type	Description
Undergraduate degree	Graduates: Normally entrants to the programme will have at least a lower second class degree in Forensic science, biological or related science.
Other international requirements	Normally a good degree in forensic, biological or related sciences with a recognised English language qualification (IELTS score of 6.5 with a minimum of 5.5 in each category).
Relevant work experience	Mature entry - Applicants not holding an honours degree in a relevant biological science will be considered on their individual merits in relation to the proposed programme. Professional experience and/ or qualifications, publications, written reports, CPD activities and other suitable evidence of accomplishment will be taken into account. All such applicants may be interviewed by the Programme Leader to assess if they have the necessary skills to complete the programme and, like their counterparts with relevant honours degrees, must provide a satisfactory reference from a suitable person such as their employer or line manager.

Extra Entry Requirements