

Overview

Programme Code	31800
Programme Title	Applied Biomedical Science
Awarding Institution	Liverpool John Moores University
Programme Type	Degree

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Science with Honours - BSH	N/A

Alternate Award Names	
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External Benchmarks

Subject Benchmark Statement	UG-Biomedical science (2019)
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Accreditation

Programme Accredited by

PSRB Name	Type of Accreditation	Valid From Date	Valid To Date	Additional notes
Health and Care Professions Council, the (HCPC)	Approved by the Health and Care Professions Council (HCPC) for the purpose of providing eligibility to apply for registration with the HCPC as a biomedical scientist.			
Institute of Biomedical Science (IBMS)	Accredited by the Institute of Biomedical Science (IBMS).			

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length Programme Length Unit
Full-Time, Face to Face	September	LJMU Taught	3 Years

Aims and Outcomes

Educational Aims of the Programme	All programmes within the School of Pharmacy and Biomolecular Sciences aim to provide graduates with a wide knowledge and understanding of core subject matter. Thus Biomedical Science (BMS) aims to provide graduates with an understanding of laboratory-based investigation of human health and disease. To provide a programme that is recognised and accredited by the IBMS and approved by the HCPC. To introduce students to the hospital environment in order to help them make informed choices about the direction of their education and training in Biomedical Science. To introduce the concepts of professional autonomy and accountability. To develop the skills required for the application of practice as a Biomedical Scientist and register with the HCPC. To develop study, information technology (IT), and communication skills to enable graduates to participate in lifelong learning. To develop skills in independent research to enable graduates to undertake postgraduate study. To encourage students to fully engage with the universities employability directives. Alternative Exit/ Interim Award Learning Outcomes - Diploma of Higher Education Applied Biomedical Sciences A student who is eligible for this award will be able to: Generate ideas through the analysis of concepts at an abstract level, with a command of highly specialised skills and the formulation of responses to concrete and abstract problems. Accept responsibility for group and personal work Analyse and evaluate information, demonstrating significant judgement across a broad range of biomedical related areas.
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Learning Outcomes

Code	Number	Description
PLO1	1	Appreciate fundamental concepts and principles of subjects underpinning biomedical science, including biochemistry, cell and tissue biology, genetics, microbiology, molecular biology, physiology
PLO2	2	Maintain laboratory notebooks and prepare laboratory reports.
PLO3	3	Use laboratory equipment and reagents to prepare data.

PLO4	4	Analyse and interpret laboratory data relevant to the specialist subjects of cellular pathology, clinical chemistry, clinical immunology, medical microbiology, clinical genetics, haematology and transfusion science.
PLO5	5	Collect, record and interpret numerical data.
PLO6	6	Communicate effectively by discussions, written materials, use of images and presentations.
PLO7	7	Use information technology to prepare, process and present information.
PLO8	8	Identify targets and follow schedules to meet targets.
PLO9	9	Identify and work to collective goals and responsibilities and respect the views and opinions of others.
PLO10	10	Manage their own learning (work independently and within time limits)
PLO11	11	Employability skill: Analysis, problem solving & decision making.
PLO12	12	Understand that biomedical science is the integrated study of a range of human disorders and disease processes together with their laboratory investigation.
PLO13	13	Employability skill: Creativity & enterprise.
PLO14	14	Employability skill: Professional written & spoken communication.
PLO15	15	Employability skill: ICT skills & digital capability.
PLO16	16	Employability skill: Numeracy & financial literacy.
PLO17	17	Employability skill: Planning & organisation.
PLO18	18	Employability skill: Team working & collaboration.
PLO19	19	Employability skill: Leadership & mobilising others.
PLO20	20	Employability skill: Intercultural skills.
PLO21	21	Recognise the importance of the theoretical basis of research in biomedical sciences.
PLO22	22	Engage with the essential facts, concepts, and principles relevant to the biomedical science specialist subjects of cellular pathology, clinical biochemistry, clinical immunology, clinical genetics, medical microbiology, haematology and transfusion science.
PLO23	23	Critically evaluate information and data from a variety of sources.
PLO24	24	Apply planning, research methodology and analytical skills to the in depth study of a topic in a chosen field of study.
PLO25	25	Apply problem solving skills to the laboratory investigation of human health and disease.
PLO26	26	Apply strategies for the critical appraisal of laboratory methods.
PLO27	27	Plan and execute laboratory experiments with an awareness of good laboratory practice (GLP) and COSHH assessment.

Course Structure

Programme Structure Description	<p>Students initially enrol on the Biomedical Science programme (32805) and those students wishing to undertake the Applied Biomedical Science route (31800) may apply when directed. Transfer is dependent upon fulfilling a set of transparent criteria, and is dependent on the availability of clinical placements. If more suitable students apply to transfer than there are clinical placements available, additional transparent selection criteria including interview are applied. 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 [5109BMBMOL], 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. Students beginning the programme prior to September 2022 will remain on the previous validated versions of the modules on their programme unless going on a Leave of absence / have been awarded Final Module Attempts by the Board of Examiners, which may require that they move to the new programme version.</p>
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Programme Structure - 360 credit points	
Level 4 - 120 credit points	
Level 4 Core - 120 credit points	CORE
[MODULE] 4102BMBMOL Cell Biology Approved 2022.01 - 20 credit points	
[MODULE] 4103BMBMOL Principles of Biochemistry Approved 2022.01 - 20 credit points	
[MODULE] 4106BMBMOL Microbiology Approved 2022.01 - 20 credit points	
[MODULE] 4107BMBMOL Fundamentals of Biomedical Science Approved 2022.01 - 20 credit points	
[MODULE] 4108BMBMOL Anatomy and Physiology Approved 2022.01 - 20 credit points	
[MODULE] 4109BMBMOL Genetics and molecular biology Approved 2022.01 - 20 credit points	
Level 5 - 120 credit points	
Level 5 Core - 120 credit points	CORE
[MODULE] 5101BMBMOL Biomedical Research Methods Approved 2022.01 - 20 credit points	
[MODULE] 5102BMBMOL Clinical Biochemistry Approved 2022.01 - 20 credit points	
[MODULE] 5107BMBMOL Hospital Practice 1 Approved 2022.01 - 20 credit points	
[MODULE] 5110BMBMOL Cellular pathology Approved 2022.01 - 20 credit points	
[MODULE] 5111BMBMOL Immunology and medical microbiology Approved 2022.01 - 20 credit points	
[MODULE] 5112BMBMOL Haematology and Transfusion Science Approved 2022.01 - 20 credit points	
Optional placement - 120 credit points	OPTIONAL
Study Abroad - 120 credit points	OPTIONAL
[MODULE] 5109BMBMOL Study Year Abroad - Biomedical Science Approved 2022.01 - 120 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE

[MODULE] 6109BMBMOL Hospital Practice 2 Approved 2022.01 - 20 credit points
[MODULE] 6110BMBMOL Medical and clinical genetics Approved 2022.01 - 20 credit points
[MODULE] 6111BMBMOL Clinical immunology and medical microbiology Approved 2022.01 - 20 credit points
[MODULE] 6112BMBMOL Integrated Biomedical Science Approved 2022.01 - 20 credit points
[MODULE] 6113BMBMOL Biomedical Science Honours Project Approved 2022.01 - 40 credit points

Approved variance from Academic Framework Regulations

Variance
Students must achieve a pass mark in all assessment components for the following modules: 5111BMBMOL, 5110BMBMOL, 5112BMBMOL, 5102BMBMOL, 6113BMBMOL, 6111BMBMOL, 6110BMBMOL, 6109BMBMOL.

Teaching, Learning and Assessment

Teaching, Learning and Assessment	Lead lectures, tutorials, seminars, laboratory sessions, work-based learning (portfolio), workshops, poster sessions, case studies, literature analysis, problem solving, data analysis and self directed study. Coursework (essays, reports, reviews) examinations (essay style, MCQ and short answer, problem solving, data analysis) and poster presentations. Portfolio-based exercises. Lead lectures, tutorials, case studies, laboratory practical classes, research based teaching materials and methods, literature reviews, seminars. Written examinations, laboratory reports, research project reports, literature review manuscripts, seminars and case study reports. Practical laboratory classes, work placements in clinical laboratories, data handling workshops, problem-based learning, seminars and lectures. Practical reports, portfolios, case study reports, project reports and written exams. Transferable/key skills are embedded in modules within the programme. Examples include the use of spreadsheet and computer packages to analyse data, seminars, oral presentations, reflective portfolios and research projects. Practical computer based exams on the use of IT, group seminars, oral presentations, project reports and portfolios.
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Opportunities for work related learning

Opportunities for work related learning
The degree programme contains 40 core credits of work experience to be completed in an accredited NHS Trust laboratory. Students are first introduced to the hospital environment in semester 2 of level 4 through an induction process and attendance at a four-week work placement during the summer. In semester 2 of level 5 the Hospital Laboratory Practice 1 module [5107BMBMOL] begins. This module also addresses the concepts of professional autonomy and accountability as well as enabling the students to develop the skills required for the application of practice in the work place. At the end of level 5, students continue their professional training during a 14-week hospital placement, the module is therefore assessed after this 14-week placement. At level 6 the students take Hospital Laboratory Practice 2 [6109BMBMOL] in semester 2 and complete their professional portfolio. Portfolio verification is completed during a further four-week placement. Students who successfully complete these two modules are eligible to apply for HCPC registration when they achieve their Honours degree.

Entry Requirements

Type	Description
A levels	Students do not directly apply to this degree through UCAS. Admission requirements are those that apply to the BSc Hons Biomedical Science and BSc Hons Biomedical Science (with foundation) from which they transfer.

Programme Contacts

Programme Leader

Contact Name
Emmanuel Babafemi

Link Tutor

Contact Name
