UNIVERSITY OF LIVERPOOL

Anatomy and Human Biology MBiol

COURSE DETAILS

- A level requirements: AAB
- UCAS code: B113
- Study mode: Full-time
- Length: 4 years

KEY DATES

- Apply by: 31 January 2024
- Starts: 23 September 2024

Course overview

This is a practical, hands-on degree in anatomy that allows you to combine cadaveric dissection with a thorough exploration of human biology at all levels of organisation, from the DNA right up to organ systems.

INTRODUCTION

The Master of Anatomy & Human Biology (MBiol) is a four-year programme, in which students first follow the three-year BSc in Anatomy & Human Biology and then continue into a fourth year, subject to performance.

In the first three years, you will study a broad range of modules that focus on anatomical topics covering the 6 main systems (MSK, cardiovascular, urogenital, respiratory, nervous, digestive) and the 6 main regions (thorax, abdomen, pelvis, head & neck, & limbs) of the body. This is complemented with wider topics such as physiology, disease biology, genetics, development, and comparative biology, and culminates in an individual dissection project. You will also have the opportunity to specialise and carry out your own research project. Each year you will be allocated time within the Human Anatomy Resource Centre, our dedicated anatomy facility.

The fourth (Master's) year aims at developing enhanced research and personal skills for students seeking a high-level career in research (e. g. studying for a PhD or working in industry) or those seeking to enhance their qualification. Students will join a research team to undertake a significant research project. Students can also apply for a six-week summer research internship in the UK or overseas or apply to spend time working in industry or in other enterprises in the final year.

WHAT YOU'LL LEARN

- Develop practical and theoretical knowledge of structural and functional anatomy in health & disease
- Develop practical skills by combining cadaveric dissection with a thorough exploration of human biology within the dedicated Human Anatomy Resource Centre
- Enhance your understanding of topical issues, ethical principles, professionalism & respect in Anatomy
- Become literate in finding, interpreting, evaluating and managing information
- Communicate ideas effectively to a variety of audiences
- Work independently and collaboratively
- Develop critical thinking and problem-solving skills
- Use lab equipment correctly and safely
- Plan, initiate, and carry out projects

Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

YEAR ONE

In this first year, you'll gain an understanding of core concepts of biology as well as the fundamental principles of immunity, infection, and therapy. You will also study how organisms develop and function and learn about ecology and the global environment. You will develop practical skills where you will discover how to utilise quantitative skills and study techniques. You will also be introduced to the universities excellent Human Anatomy Resource Centre.

COMPULSORY MODULES

- Biology core concepts, principles, and fundamentals BIOS101
- Development, function, immunity, infection, and therapeutics BIOS102
- Introductory Practical Skills for Life Sciences BIOS103
- From Individuals to Ecosystem BIOS104
- Study and Communication Skills Tutorials BIOS105
- Applied Practical Research Skills for Life Sciences BIOS106

Programme details and modules listed are illustrative only and subject to change.

YEAR TWO

In your second year you'll expand your range of knowledge building those essential research skills, experimental design and analysis together with professional skills preparing you for a career within or outside the area of Anatomy & Human Biology. You will begin to develop skills in cadaveric prosection & dissection through modules in systems anatomy, functional musculoskeletal anatomy and anatomy of the thorax. In addition, you will have optional modules enabling you to follow your interest in cellular biology, therapeutics, physiology, infection biology or comparative/animal biology.

COMPULSORY MODULES

- Genetics, Microbiology & Infection BIOS201
- Human Anatomy of the Thorax BIOS202
- Intermediary Practical Research Skills for Life Sciences BIOS203
- Academic & professional skills tutorials BIOS205
- The Cellular Basis of Health & Disease BIOS209
- Functional Anatomy of the Human Musculoskeletal System BIOS210
- Human Systems Anatomy BIOS213

OPTIONAL MODULES (CHOOSE ONE)

- Metabolism BIOS212
- Cellular & Systems Physiology BIOS214

- Drug Discovery & Development BIOS216
- Animal Anatomy, Physiology & Husbandry BIOS220
- Animal Ecophysiology BIOS222

Programme details and modules listed are illustrative only and subject to change.

YEAR THREE

Year three will provide an unparalleled opportunity for you to learn at the cutting edge of anatomical research and be taught by world-leading academics in the subjects of anatomy of the abdomen & pelvis, head, neck & neurological anatomy, alongside a choice of modules covering application of your knowledge to wider life sciences disciplines. You will also be able to showcase your dissection and prosection skills through an individual dissection module and will have the opportunity to take a physical or virtual placement. Central to this year is the research project where you will plan and execute your own research, analyse and critically evaluate data and communicate your research findings in your chosen specialisation.

COMPULSORY MODULES

- Research Project BIOS301
- Introduction to the World of Work BIOS302
- Research Methods BIOS303
- Applied Anatomy and Dissection BIOS304
- Human Anatomy of the Abdomen, Pelvis and Perineum BIOS305
- Human Anatomy of the Head & Neck BIOS329

OPTIONAL MODULES (CHOOSE ONE)

- Molecular, Clinical & Translational Cancer BIOS307
- Molecular Systems Biology BIOS309
- Translational Pharmacology BIOS313

Programme details and modules listed are illustrative only and subject to change.

YEAR FOUR

The fourth year of study offers great flexibility – students may spend it entirely on campus at Liverpool, but more commonly they take up opportunities to broaden their experiences, for example a six-week research internship in the UK (in hospitals, industry or research institutes) or abroad (in our partner universities in Thailand or China). Others may elect to spend the entire fourth year on placement, in similar host institutions. Students will take core modules in research methods and statistics or informatics, together with a 60-credit research project. Students may replace the internship with other modules that cover advanced topics of global importance.

COMPULSORY MODULES

- Research Project LIFE700

- Research Methods LIFE731

OPTIONAL MODULES (CHOOSE ONE)

- Advanced Statistics for Biological Research LIFE707
- Informatics for Life Sciences LIFE721

OPTIONAL MODULES (Students choose either the research internship, or two of the remaining modules)

- Research Internship LIFE701
- Coding for Life Sciences LIFE733
- Cellular Biotechnology and Biological Imaging LIFE749
- Frontiers in Cancer Research LIFE724
- Cancer Clinical Trials LIFE726
- Immunology LIFE728
- Diagnostics Therapeutics and Vaccines LIFE732
- Computational Biology LIFE752
- Proteomics, Metabolomics and Data Analysis LIFE754
- Synthetic Biology and Biotechnology LIFE756

Core modules

- Research Methods and Applications in Biological Sciences
- Research Project

Programme details and modules listed are illustrative only and subject to change.

HOW YOU'LL LEARN

You will experience a range of learning environments during your studies at Liverpool. These will include student-centred activities as well as lectures, tutorials, laboratory practicals, dissection classes, fieldwork, data handling sessions and computer workshops. Some of these activities will be performed individually, such as personal research projects, and others in small tutorial or project groups, in addition to formal lectures and workshops. You will have research staff as well as your own academic adviser for individual tuition on our acclaimed tutorial programme.

HOW YOU'RE ASSESSED

As well as factual knowledge and understanding, biologists need practical and organisational skills, and an ability to work both alone and with other people. We record development of these abilities through continuous assessment during each semester and by final examination.

LIVERPOOL HALLMARKS

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

Careers and employability

As a Life Sciences graduate from the University of Liverpool, you will have an excellent set of career options ahead of you.

Typical types of roles/routes our graduates have gone on include:

- Postgraduate study: (MBiolSci, MSc, MRes, MPhil or PhD)
- Public sector – research institutes, government departments, the National Health Service, forensic science and the Environment Agency.
- Commercial sectors – pharmaceutical, food, biotechnology, water and agriculture industries.
- Journalists and information/liaison officers – by developments in molecular biology and biotechnology.
- Teaching profession by taking a postgraduate qualification (PGCE).
- Routes to postgraduate Medicine, Dentistry or Veterinary Science.

Recent employers and sectors:

- Pharmaceutical sector: Eli-Lilly, AstraZeneca, Glaxo SmithKline, NHS, Red X Pharma;
- Tourism/Conservation sector: Blue Planet Aquarium, Chester Zoo, RSPCA;
- Government/Legal sector: Crown Prosecution Service, The Environment Agency, Public Health England, Home Affairs, Ministry of Defence, Security and International Development;
- Media/Entertainment Sector: BBC;
- Corporate and Utilities sector: United Utilities, Vodafone, Unilever.

4 IN 5 **LIFE SCIENCES STUDENTS FIND THEIR MAIN ACTIVITY AFTER GRADUATION MEANINGFUL.**

Graduate Outcomes, 2018-19.

Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

TUITION FEES

UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)	
Full-time place, per year	£9,250

International fees	
Full-time place, per year	£27,200

Fees are correct for the academic year 2024/25
Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. Learn more about tuition fees, funding and student finance.

ADDITIONAL COSTS

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This includes the costs associated with placements or internships, and the optional field course in Uganda.

Find out more about the additional study costs that may apply to this course.

SCHOLARSHIPS AND BURSARIES

We offer a range of scholarships and bursaries to provide tuition fee discounts and help with living expenses while at university.

Check out our Undergraduate Global Advancement Scholarship. This offers a tuition fee discount of up to £5,000 for eligible students starting an undergraduate degree from September 2024. There's also the Liverpool Bursary which is worth £2,000 per year for eligible students.

Discover our full range of undergraduate scholarships and bursaries

Entry requirements

The qualifications and exam results you'll need to apply for this course.

Your qualification	**Requirements** About our typical entry requirements
A levels	AAB including A level Biology at grade A. Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **ABB** with **A** in the EPQ. You may automatically qualify for reduced entry requirements through our contextual offers scheme.
GCSE	4/C in English and 4/C in Mathematics
Subject requirements	Biology and a second science, preferably Chemistry, at A level Also accepted as a second science: Environmental Science, Mathematics, Physics, Geography, Psychology, Geology and Applied Science. For applicants from England, where A levels in Biology, Chemistry or Physics have been taken, we will also require a pass in the Practical Endorsement
BTEC Level 3 National Extended Diploma	D*D*D in Applied Science with a selection of preferred units in Biology and Chemistry, to include Distinction in Units 1 and 5 (Principles and Applications of Science I and II). For previous BTEC (QCF) qualification: D*D*D in Applied Science with a selection of preferred units in Biology and Chemistry, with at least 120 Level 3 credits at Distinction. Please note alternative BTEC subjects are not acceptable for this programme.

Your qualification	**Requirements** About our typical entry requirements
BTEC Applied Science unit requirements	View the BTEC Applied Science unit requirements.
International Baccalaureate	34 including 6 in Higher Level Biology, and 5 in another higher level subject
Irish Leaving Certificate	H1, H1, H2, H2, H2, H3
Scottish Higher/Advanced Higher	Not accepted without Advanced Highers at grades AAB.
Welsh Baccalaureate Advanced	Accepted at grade B as equivalent to a third non-science A level at grade B.
Access	45 Level 3 credits in graded units in a relevant Diploma, including 30 at Distinction and a further 15 with at least Merit. 15 Distinctions are required in each of Biology and Chemistry. GCSE Mathematics and English grade C/4 also required.
International qualifications	Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the University of Liverpool International College, means you're guaranteed a place on your chosen course.

ALTERNATIVE ENTRY REQUIREMENTS

- If your qualification isn't listed here, or you're taking a combination of qualifications, contact us for advice
- Applications from mature students are welcome.

THE ORIGINAL REDBRICK

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