Department of Biological Sciences

About the department

The Department of Biological Sciences offers an exciting range of single honours degree programmes ranging from Biochemistry and Biomedical Sciences to Zoology and Ecology. All our modules are taught by specialist staff with high professional standards and international reputations. We take great pride in our approachability, friendliness and the support that we offer our students. In the National Student Survey 2020, the Department received a satisfaction rating of 100% from final year biology students.

Entry requirements

The modules listed below are open to all Study Abroad and International Exchange students, subject to any required previous knowledge or qualifications, as stated below. Suitability to study the modules will be assessed by the Department on a case-by-case basis. For further information about a module click on the underlined link to 'subject information' to see the entry in the online module catalogue.

Each module is worth 15 credits. Each module is taught in either Term 1 (Autumn) or Term 2 (Spring) as stated below. Final exams are usually held the following term.

For students visiting for Term 1 only we offer the 'V' version of modules, where the final exam is held in the final week of Term 1 (December).

The information contained in the module outlines on the following pages is correct at the time of publication but may be subject to change as part of our policy of continuous improvement and development.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS1031	Chemistry of Life	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1032	Fundamental Biochemistry	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1042	Vertebrate Evolution and Diversity	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (biology or geography) is expected.
BS1043	Green Planet: Plants and Our Future	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (biology or geography) is expected.
BS1051	Ecology and Conservation	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (biology or geography) is expected.
BS1052	Biomes and Ecosystems	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (biology or geography) is expected.
BS1061	Introductory Animal Physiology	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1061V	Introductory Animal Physiology	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS1062	Introduction to Human Physiology in Health and Disease	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1071	Cell Biology and the Origin of Life	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1071V	Cell Biology and The Origin of Life	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1072	Genetics	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1072V	Genetics	Term 1	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS1091	Protein Biochemistry and Enzymology	Term 2	15.00	Syllabus information A-level (or equivalent) knowledge of science (maths, physics, chemistry or biology) is expected.
BS2005	Microbiology	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and genetics is expected.
BS2010	Invertebrate Biology: Structure, Behaviour and Evolution	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of animal physiology is expected.
BS2010V	Invertebrate Biology: Structure, Behaviour and Evolution	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of animal physiology is expected.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS2020	Food Security, Sustainability and Green Biotechnology	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of plant biology and genetics is expected.
BS2040	Cell Dynamics: Division and Movement	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and genetics is expected.
BS2050	Human Physiology in Health and Disease (II)	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of physiology is expected.
BS2050V	Human Physiology in Health and Disease (II)	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of physiology is expected.
BS2060	Developmental Biology	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and genetics is expected.
BS2060V	Developmental Biology	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and genetics is expected.
BS2090	Plant Biotic Interactions and Ecological Networks	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of plant biology and ecology is expected.
BS2090V	Plant Biotic Interactions and Ecological Networks	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of plant biology and ecology is expected.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS2120	Biological Data Analysis and Interpretation	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some fundamental background in biology and maths is expected.
BS2120V	Biological Data Analysis and Interpretation	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some fundamental background in biology and maths is expected.
BS2140	Animal Behaviour	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some fundamental background in animal physiology and biology is expected.
BS2150	Applications Of Molecular Genetics In Biology	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of genetics is expected.
BS2150V	Applications Of Molecular Genetics In Biology	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of genetics is expected.
BS2160	Evolution	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some fundamental background in biology and maths is expected.
BS2510	Bioenergetics and Metabolism	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.
BS2510V	Bioenergetics and Metabolism	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS2520	Protein Structure and Function	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.
BS2520V	Protein Structure and Function	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.
BS2530	Molecular Biology	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of genetics is expected.
BS2540	Immunology	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of genetics and cell biology is expected.
BS2550	Neuronal and Cellular Signalling	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and physiology is expected.
BS2550V	Neuronal & Cellular Signalling	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of cell biology and physiology is expected.
BS2560	Pharmacology and Toxicology	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of physiology and biochemistry is expected.
BS2570	Physical Biochemistry for Life Scientists	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.
BS2570V	Physical Biochemistry for Life Scientists	Term 1	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS2580	Natural Product Biochemistry and Sustainability	Term 2	15.00	Syllabus information This is a second-year module (i.e. intermediate level) and some prior knowledge of biochemistry is expected.
BS3060	Conservation Science	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of ecology is required.
BS3120	Population and Community Ecology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of ecology is required.
BS3120V	Population and Community Ecology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of ecology is required.
BS3180	Marine Ecology and Biodiversity	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of animal biology and ecology is required.
BS3190	Climate Change: Plants and the Environment	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level). Prior knowledge of plant science and genetics is required.
BS3210	Evolutionary Ecology of Vertebrates	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level). Prior knowledge of animal biology and evolution is required.
BS3220	Extreme Animal Physiology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of animal behaviour or animal physiology is required.
BS3220V	Extreme Animal Physiology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of animal behaviour or animal physiology is required.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS3230	Circadian Biology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and cell biology is required.
BS3230V	Circadian Biology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and cell biology is required.
BS3240	Evolutionary Medicine	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics is required.
BS3410	Biotechnology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and cell biology is required.
BS3410V	Biotechnology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and cell biology is required.
BS3420	Nutrition and Medical Biochemistry	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level). Prior knowledge of biochemistry is required.
BS3510	Molecular and Medical Microbiology	Term 1	15.00	Syllabus information This is a third-year course (i.e. advanced level). Prior knowledge of cell biology, microbiology and immunology is required.
BS3510V	Molecular and Medical Microbiology	Term 1	15.00	Syllabus information This is a third-year course (i.e. advanced level). Prior knowledge of cell biology, microbiology and immunology is required.
BS3530	Applications of Genetic Engineering in Health and Disease	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and molecular biology is required.

Module options for visiting students 2025-26

Module number	Module title	Run time	UK Credits	Link to syllabus
BS3530V	Applications of Genetic Engineering in Health and Disease	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and molecular biology is required.
BS3540	Cell and Molecular Biology of Cancer	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of cell biology and molecular biology is required.
BS3560	Functional Genomics, Proteomics and Bioinformatics	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level); prior knowledge of molecular biology is required.
BS3570	Human Embryology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of physiology or developmental biology is required.
BS3570V	Human Embryology	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of physiology or developmental biology is required.
BS3580	Cell And Molecular Neuroscience	Term 2	15.00	Syllabus information This is a third-year module (i.e. advanced level); prior knowledge of neuronal signalling is required.
BS3590	Molecular Basis of Inherited Disease	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and molecular biology is required.
BS3590V	Molecular Basis of Inherited Disease	Term 1	15.00	Syllabus information This is a third-year module (i.e. advanced level) and prior knowledge of genetics and molecular biology is required.