UNIVERSITY OF LEICESTER

Programme Specification (Undergraduate)

For 2021/22 direct entry or entry by transfer from BSc programmes

Date amended: 15 November 2023

Programme title(s) and UCAS code(s):

MBiolSci Biological Sciences*

MBiolSci Biological Sciences (Biochemistry)*

MBiolSci Biological Sciences (Genetics)*

MBiolSci Biological Sciences (Microbiology)*

MBiolSci Biological Sciences (Physiology with Pharmacology)*

MBiolSci Biological Sciences (Zoology)*

MBiolSci Biological Sciences (Neuroscience)*

MBiolSci Medical Biosciences (Biochemistry)*

MBiolSci Medical Biosciences (Genetics)*

MBiolSci Medical Biosciences (Physiology)*

MBiolSci Medical Biosciences (Microbiology)*

*with or without an optional Year in Industry or Year Abroad

Exit Awards are available (which cannot be applied for) as follows:

HECert Biological Sciences

HEDip Biological Sciences

HECert Medical Biosciences

HEDip Medical Biosciences

BSc Biological Sciences*

BSc Biological Sciences (Biochemistry)*

BSc Biological Sciences (Genetics)*

BSc Biological Sciences (Microbiology)*

BSc Biological Sciences (Physiology with Pharmacology)*

BSc Biological Sciences (Zoology)*

BSc Biological Sciences (Neuroscience)*

BSc Medical Biochemistry*

BSc Medical Genetics*

BSc Medical Physiology*

BSc Medical Microbiology*

*with or without an optional Year in Industry or Year Abroad

1. **Awarding body or institution:** University of Leicester

2. a) **Mode of study:** Full time

   b) **Type of study:** Campus-based

3. **Registration periods:**

The normal period of registration for the MBiolSci is four years (five years for degrees 'with a year in industry/abroad')

The maximum period of registration for the MBiolSci is six years (seven years for degrees 'with a year in industry/abroad')

4. **Typical entry requirements:**

A-levels: typical offer AAB/ABB, normally including at least two relevant science subjects from Biology, Chemistry, Physics or Maths. We may consider two AS-levels in place of one A2-level. General Studies not accepted.

EPQ with A-levels: typical offer BBB + EPQ at grade B. A-level subjects to include two relevant science subjects from Biology (preferred), Chemistry, Physics or Maths. General Studies not accepted.

GCSE: At least Grade C/4 in both English Language and Maths (if not held at A-level)

Access to HE Diploma: Pass Science diploma with 45 credits at level three, 30 of which must be at distinction.

International Baccalaureate: Pass Diploma with 32/30 points, with a minimum of 17/16 points at HL to include grade 6 and 5 in at least two relevant science subjects from Biology, Chemistry, Physics or Maths. Minimum of 3 in HL Maths or 4 in SL Mathematics, or 5 in Maths Studies required if grade C/4 not held at GCSE. Minimum of 4 in English Language required if grade C/4 not

held at GCSE

BTEC Nationals: Pass Applied Science Diploma with DDD plus five GCSEs at B/5 or above including two relevant sciences. Please contact Admissions before applying.

English Language Requirements

IELTS 6.5 or equivalent. If an applicant's first language is not English, they may need to provide evidence of their English language ability. If they do not yet meet our requirements, the English Language Teaching Unit (ELTU) offers a range of courses to help applicants to improve their English to the necessary standard.

5. Accreditation of Prior Learning:

Direct 2nd year entry is considered subject to completion of a level 4 programme of comparable content to those studies in year 1 of this programme, passing all modules and with a year mark of at least 65%.

6. Programme aims:

The programme aims to provide:

At levels 4, 5 and 6:

- a flexible teaching and learning programme of high quality that is informed by an active research environment in which students develop their own interests
- a stimulating and supportive working environment
- an education that will enable graduates to follow a variety of careers including higher degrees and research
- have a broad appreciation of biological sciences or of biomedical and related disciplines with an emphasis on human health and disease, and advanced knowledge of one or more areas including appreciation of aspects of the underpinning research;
- develop a range of subject-specific skills including practical and transferable skills aligned to the Transferable Skills Framework: Interpersonal Skills; Skills associated with Exploration and Implementation and Self-Management Skills;

In addition to the above, at level 7:

- Provide instruction in current concepts and techniques of a specialised area of Biological Sciences as applied in modern research.
- Offer practical instruction in experimental techniques and use of common laboratory equipment.

- Give students direct experience of laboratory-based research during a long- research placement

- Provide a framework to develop skills to plan research and devise strategies to achieve specific research goals.

- Prepare graduates for employment in molecular, biomedical or biotechnological research and related industries, or for entry to PhD programmes.

In addition, for the "with a Year in Industry" variants:

- To provide students with an experience of the application of Biological and/or Biomedical professional skills in an industrial environment and to reinforce knowledge through its use in different environments.

- To gain an appreciation of the full range of skills required by Biological and Biomedical Scientists in industry.

In addition, for the "with a Year Abroad" variants:

- To provide experience of study of Biological or Medical Biosciences at an overseas University, to reinforce knowledge through use in different environments and when studying abroad develop communication skills in a foreign language.

7. Reference points used to inform the programme specification:

- QAA Benchmarking Statement: Biosciences

- QAA Master's Degree Characteristics Statement

- University of Leicester Learning and Teaching Strategy 2016-2020

- External Examiners' reports (annual) External Examiners' reports

- Framework for Higher Education Qualifications (FHEQ)

- University of Leicester Periodic Developmental Review, May 2012

- Student feedback

- Student destinations data

- University Employability Strategy

- Destinations of Leavers from Higher Education (DLHE) and Longitudinal Educational Outcomes survey (LEO).

8. Programme Outcomes:

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
(a) Discipline specific knowledge and competencies		
(i) Mastery of an appropriate body of knowledge		
Demonstrate an awareness of main principles of biological sciences, Medical Biosciences and related disciplines and explain core concepts of their chosen discipline. Describe current areas of advance in their chosen specialisation(s). **In addition:** Demonstrate high-level knowledge of a research topic **(MBiolSci only)**	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Independent research **(MBiolSci only)**	Examination, coursework (e.g. practical reports, written reports, Essay, data analysis, field reports, oral presentations, group reports, video production, poster production, level 6 dissertation) **In addition:** Individual research project and level 7 dissertation. **(MBiolSci only)**
(ii) Understanding and application of key concepts and techniques		
Describe and apply safely appropriate experimental procedures in biological sciences, Medical Biosciences and related disciplines. Apply a scientific approach to the solution of problems in the context of their chosen specializations and appreciate the rationale	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study.	Examination and coursework **In addition:** Experimental analyses. Contributions to discussions (formative). Individual research project. Project report. **(MBiolSci only)**

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
of experimental design. Explain core concepts of their chosen discipline. **In addition:** Demonstrate Understanding of advanced concepts of their chosen discipline. Practical demonstration of experimental method. Competent use of standard and specialized equipment. Ability to interrogate publication databases and biological data resources. Manipulate simple biological data. **(MBiolSci only)**		
(iii) Critical analysis of key issues		
Demonstrate a capacity for critical scientific analysis of issues in the context of biological sciences, Medical Biosciences and related disciplines. **In addition:** Critically appraise data and results and critically review literature. **(MBiolSci only)**	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Laboratory classes, laboratory research project supervision and appraisals. Independent research. **(MBiolSci only)**	Examination and coursework **In addition:** Experimental analyses. Contributions to discussions. Project appraisals (formative). Project report. Individual research project. **(MBiolSci only)**
(iv) Clear and concise presentation of material		

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Communicate orally and in writing concepts and arguments in biological Sciences, Medical Biosciences and related disciplines. **In addition:** Present scientific results. Participate in scientific discussion. **(MBiolSci only)**	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Laboratory classes. Research project supervision. Research project laboratory meetings. **(MBiolSci only)**	Examination and coursework **In addition:** Contributions to discussions. Laboratory presentations, Project presentations (formative and assessed). **(MBiolSci only)**
(v) Critical appraisal of evidence with appropriate insight		
Demonstrate the capacity to analyse and criticise evidence from both experimental procedures and the literature. **In addition:** Demonstrate awareness of the experimental method and project design **(MBiolSci only)**	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Laboratory classes. Lectures. Research project supervision. Tutorials. **(MBiolSci only)**	Examination and coursework **In addition:** Experimental analyses. Individual research project and dissertation. **(MBiolSci only)**
(vi) Other discipline specific competencies		
In the year in industry/abroad programmes, demonstrate the capacity to work in an industrial or other research laboratory or study in another European, American or Japanese University.	Laboratory work, research project	Research report, practical reports.

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
(b) Transferable skills		
Oral communication		
Communicate orally, with clarity and coherence, concepts and arguments in biological sciences, Medical Biosciences and related disciplines. **In addition:** deliver effective oral presentations. **(MBiolSci only)**	Tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work.	Oral presentations, group reports, tutorials. **In addition:** Individual research project . Project appraisals (formative). Project report. Research seminar. **(MBiolSci only).**
Research skills		
Should be able to problem solve, analyse data and interpret simple statistical tests. Should maintain useful research notes/records. **(MBiolSci only)**	Laboratory and computer classes. Individual research project. Project supervision **(MBiolSci only).**	Performance in laboratory and computer classes (formative). Laboratory notebook. Experimental analyses. Examinations: problem-based. Individual research project **(MBiolSci only).**
Communication Skills		
Communicate in writing, with clarity and coherence, concepts and arguments in biological sciences, Medical Biosciences and related disciplines. **In addition:** Write effective scientific reports **(MBiolSci only)**	Tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work. **In addition:** Study skills support. Project supervision. Individual research project **(MBiolSci only).**	Examination and coursework **In addition:** Individual research project. Project appraisals (formative). Project report. Research seminar. **(All MBiolSci)**

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Information technology		
Demonstrate the effective use of IT for accessing databases and scientific literature; manipulating, processing and presenting data; presenting written assignments. **In addition:** Ability to interrogate publication databases and use bibliographic software. Identify, retrieve and manipulate simple biological data. Demonstrate mastery of word processing and presentation software. **(MBiolSci only)**	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Laboratory and computer classes. Study skills support. **(MBiolSci only)**	Examination and coursework **In addition:** Experimental analyses. Essay. Seminar presentation. Project report **(MBiolSci only)**
(iv) Numeracy		
Understand and manipulate numerical data, solve problems using a variety of methods and apply numerical and statistical techniques to data analysis.	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study.	Examination and coursework
(v) Team working		
Demonstrate the ability to work as part of a group **In addition:** Display project management and organizational skillsEffective interaction	Tutorials, group work, research projects. **In addition:** Individual research project Project supervision **(MBiolSci**	Group reports, use of class data to generate practical reports **In addition:** Assessment of project Formative feedback in laboratory classes.

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
with supervisor. **(MBiolSci only)**	**only)**	**(MBiolSci only).**
(vi) Problem solving		
Apply a scientific approach to the solution of problems in the context of their chosen specialisations and appreciate the rationale of experimental design.	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study. **In addition:** Individual research project Project supervision **(MBiolSci only)**	Examination and coursework **In addition:** Assessment of project Formative feedback in laboratory classes. **(MBiolSci only).**
(vii) Information handling		
Demonstrate the capacity to access a variety of resource materials and to analyse evidence from both experimental procedures and the literature.	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, and private study.	Examination and coursework
(viii) Skills for lifelong learning		
Demonstrate the acquisition of the skills and attributes necessary for lifelong learning, including: intellectual independence, effective time management, the ability to work as part of a team, the use of IT and the capacity to access and utilise a variety of	Lectures, tutorials, seminars, practical classes, computer classes, discussions, fieldwork, research projects, group work, directed reading, resource-based learning, private study, career development programme. **In addition:** Library and IT skills, study skills support. Individual research project	Examination, coursework, personal development planning. **In addition:** Essay. Individual research project. Project appraisals (formative) **(MBiolSci only).**

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
resource materials. **In addition:** Should be able to apply study skills and manage information. Develop specialization and manage project **(MBiolSci only).**	**(MBiolSci only).**	

9. Progression points:

Progression from levels 4 to 5 and 5 to 6

The programme follows the scheme of progression set out in Senate Regulation 5 with the following additional requirements:

In order to remain on the MBiolSci programme students are required to achieve a CWA of at least 50% at the end of level 5 and have no resits. Students whose CWA is between 45-50% (or who have a resit) will be individually considered for progression by the exam board in light of mitigating or other circumstances. Students who fail to meet these criteria at the end of the second year are required to transfer to the relevant BSc programme.

The Board of Examiners reserves the right to determine the progression of students who carry failed credits but have the right to a further resit: where these credits are in modules that are pre-requisite for subsequent modules or where the student has a low overall level of attainment, the Board can require the student to repeat level 4 or resit the failed modules without residence rather than proceed to the next year carrying failed modules to be resat alongside the current modules. In cases where a student has failed to meet a requirement to progress he or she will be required to withdraw from the course.

Progression from level 6 to 7

To progress to level 7, students will need a level 6 CWA of 50.00% or higher. Those failing to achieve this will be considered by the Board of Examiners for the appropriate BSc with or without industry. In exceptional circumstances a student may fail credits in year 3. If only 15 credits are failed then students may proceed to level 7 and re-sit the failed assessments or alternatively graduate with a BSc; levels 4, 5 and 6 of the MBiolSci programme meet the intended learning outcomes of the equivalent BSc programme. If students do not pass the level 6 (Y3) 30 credit module, they will be at high-risk of not achieving the necessary credit-weighted-average for progression to level 7.

The number of students allowed to transfer to the MBiolSci will be capped at 15. Should more

than 15 students apply performance at interview will be used to select those progressing to level 7.

Progression to Year Abroad

Students will have the opportunity to take a Year Abroad either between levels 5 and 6 OR levels 6 and 7. Student can only take a Year Abroad on one occasion and cannot take both a Year Abroad AND a Year in Industry.

To take a Year Abroad after level 5, students would need a CWA of 55.00% or higher at both level 4 and 5 and be carrying no failed modules.

To take a Year Abroad after level 6, students would need a CWA of 55.00% or higher at levels 4, 5 and 6 and no failed modules.

Progression to Year in Industry

Students will have the opportunity to take a Year in Industry either between levels 5 and 6 OR levels 6 and 7. Student can only take a Year in Industry on one occasion and cannot take both a Year in Industry AND a Year Abroad

To take a Year in Industry after level 5, students would need to meet standard University eligibility requirements to progress to the next level of study. Students who obtain a level 5 CWA of less than 50.00% will be permitted to take a Year in Industry but will not be eligible for progression to level 7, and therefore would revert to a BSc (with a Year in Industry). See 'Progression from levels 4 to 5 and 5 to 6' for more information.

To take a Year in Industry after level 6, students would need a level 5 CWA of 50.00% or higher and a level 6 CWA of 50.00% or higher. Students who do not meet the eligibility criteria, but who meet the requirements to graduate with a BSc, would graduate that year with a BSc. See 'Progression from level 6 to 7' for more information.

Exit awards

Students who fail to complete level 5 study, level 6 study or level 7 study will be eligible for the exit awards: HECert Biological Sciences; HEDip Biological Sciences and BSc (hons) Biological Sciences respectively. Students are not permitted to register purely for this HECert or HE Dip.

Exit Awards are available (which cannot be applied for) as follows:

HECert Biological Sciences

HEDip Biological Sciences

HECert Medical Biosciences

HEDip Medical Biosciences

BSc Biological Sciences*

BSc Biological Sciences (Biochemistry)*

BSc Biological Sciences (Genetics)*

BSc Biological Sciences (Microbiology)*

BSc Biological Sciences (Physiology with Pharmacology)*

BSc Biological Sciences (Zoology)*

BSc Biological Sciences (Neuroscience)*

BSc Medical Biochemistry*
BSc Medical Genetics*
BSc Medical Physiology*
BSc Medical Microbiology*

*with or without an optional Year in Industry or Year Abroad

10. Scheme of Assessment

The programme follows the standard scheme of award and classification set out in Senate Regulation 5.

11. Special features:

Students receive a broad level 4 education in biological sciences, Medical Biosciences and related disciplines along with training in key skills including the Leicester Award. As the course progresses into level 5 and 6, students have the option to specialise progressively within the specified subject streams or to retain a broader perspective. Opportunities are available to take placements within related industries, or to study at universities abroad.

The School has a strong reputation for research and the range of staff expertise enables provision of research-led, level 6 and 7 programmes that offer breadth and depth. In the fourth year, the students move on to a level 7, 60 credit taught programme that mirrors one of the School's laboratory-based MSc programmes; they then follow this up with a 60 credit research project.

12. Indications of programme quality

- External examiner evaluations.
- Annual Developmental Review
- Periodic Development Review
- Module Review
- Destinations of Leavers from Higher Education (DLHE) and Longitudinal Educational Outcomes survey (LEO).

- National Student Survey
- Student Feedback

13. External Examiner(s) reports

The details of the External Examiner(s) for this programme and the most recent External Examiners' reports for this programme can be found at exampapers@Leicester [log-in required]

14. Appendix 1: Level 4, 5 and 6 Programme structure (programme regulations)

15. Appendix 2: Level 7 Programme structure (programme regulations)

16. Appendix 3: Module specifications

See module specification database http://www.le.ac.uk/sas/courses/documentation

Appendix 1a: Level 4, 5 and 6 programme structure
Level 7 programme structure appear in Appendix 1b.

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core module:

BS2000 Research Topic (15)

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2040 Bioinformatics (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2078 A Field Guide to Evolution (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Biological Sciences with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3000 Evolutionary Genetics (15)

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

BS3015 Molecular and Cellular Immunology (15)

BS3031 Human Genetics (15)

BS3054 Molecular & Cellular Pharmacology (15)

BS3055 Molecular & Cellular Neuroscience (15)

BS3064 Comparative Neurobiology (15)

BS3068 Microbial Biotechnology (15)

BS3070 Structural Biology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions

MBiolSci Biological Sciences with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Biochemistry)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2092 Molecular and Cell Biology (15)

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2030 Principles of Microbiology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

Core module:

BS2091 Biochemistry of Nucleic Acids (15)

Choose ONE or TWO modules from:

BS2040 Bioinformatics (15)

BS2093 Protein Control in Cellular Regulation (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2078 A Field Guide to Evolution (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Biochemistry) with a Year in Industry

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Plus core module:

BS3070 Structural Biology (15)

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

Semester total: 60 credits

Semester 2

Core module:

BS3003 Cancer Cell & Molecular Biology (15)

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Biochemistry) with a Year in Industry

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Genetics)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2009 Genomes (15)

Choose ONE or TWO modules from:

Semester 1

BS2092 Molecular and Cell Biology (15)

Semester 2

BS2026 Genes, Development & Inheritance (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2030 Principles of Microbiology (15)

MB2020 Medical Microbiology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Semester total: 60 credits

Semester 2

Core modules:

BS2040 Bioinformatics (15)

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2078 A Field Guide to Evolution (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Genetics) with a Year in Industry

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Plus core modules:

BS3000 Evolutionary Genetics (15)

BS3031 Human Genetics (15)

Semester total: 60 credits

Semester 2

Choose ONE or TWO modules from:

BS3011 Microbial Pathogenesis and Genomics (15)

BS3073 Conservation and Ecological Genetics (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Genetics) with a Year in Industry

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Microbiology)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2030 Principles of Microbiology (15)

MB2020 Medical Microbiology (15)

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2092 Molecular and Cell Biology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Semester total: 60 credits

Semester 2

Core modules:

BS2032 Immunology and Eukaryotic Microbiology(15)

OR

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2026 Genes, Development & Inheritance (15)

BS2040 Bioinformatics (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2078 A Field Guide to Evolution (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Microbiology) with a Year in Industry

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Choose THREE OR FOUR modules from:

Semester 1

BS3015 Molecular and Cellular Immunology (15)

BS3068 Microbial Biotechnology (15)

Semester2

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3000 Evolutionary Genetics (15)

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

BS3031 Human Genetics (15)

BS3054 Molecular & Cellular Pharmacology (15)

BS3055 Molecular & Cellular Neuroscience (15)

BS3064 Comparative Neurobiology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003	Cancer Cell & Molecular Biology (15)
BS3016	Neuroscience Futures (15)
BS3033	Physiology, Pharmacology and Behaviour (15)
BS3056	Cellular Physiology of the Cardiovascular System (15)
BS3073	Conservation and Ecological Genetics (15)
BS3080	Behavioural Ecology (15)
NT3200	Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Microbiology) with a Year in Industry

Core module:

BS4400	Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Physiology with Pharmacology)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2013 Physiology and Pharmacology (15)

Choose ONE or TWO modules from:

Semester 1

BS2015 Physiology of Excitable Cells (15)

Semester 2

BS2093 Protein Control in Cellular Regulation (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

MB2020 Medical Microbiology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Semester total: 60 credits

Semester 2

Core module:

BS2014 Exercise Physiology and Pharmacology (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2040 Bioinformatics (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2078 A Field Guide to Evolution (15)

BS2091 Biochemistry of Nucleic Acids (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Physiology with Pharmacology) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Core module:

BS3054 Molecular and Cellular Pharmacology (15)

BS3055 Molecular and Cellular Neuroscience (15)

Semester total: 60 credits

Semester 2

Core module:

BS3056 Cellular Physiology of the Cardiovascular System (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Physiology with Pharmacology) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Zoology)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Choose THREE OR FOUR modules from:

Semester 1

BS2009 Genomes (15)

BS2015 Physiology of Excitable Cells (15)

Semester 2

BS2078 A Field Guide to Evolution (15)

BS2026 Genes, Development & Inheritance (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2013 Physiology and Pharmacology (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

Core module:

BS2077 Neurobiology & Animal Behaviour (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2040 Bioinformatics (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Zoology) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Choose THREE OR FOUR modules from:

Semester 1

BS3064 Comparative Neurobiology (15)

Semester 2

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3000 Evolutionary Genetics (15) **(Recommended module)**

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

BS3015 Molecular and Cellular Immunology (15)

BS3031 Human Genetics (15)

BS3054 Molecular & Cellular Pharmacology (15)

BS3055 Molecular & Cellular Neuroscience (15)

BS3068 Microbial Biotechnology (15)

BS3070 Structural Biology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

1 Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Zoology) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Biological Sciences (Neuroscience)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

BS1070 Biodiversity & Behaviour - An Introduction to Zoology (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

BS2015 Physiology of Excitable Cells (15)

Choose ONE or TWO modules from:

Semester 1

BS2013 Physiology and Pharmacology (15)

Semester 2

BS2040 Bioinformatics (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

MB2020 Medical Microbiology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Semester total: 60 credits

Semester 2

Core module:

BS2066 Behavioural Neurobiology (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2078 A Field Guide to Evolution (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Biological Sciences (Neuroscience) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Core module:

BS3055 Molecular & Cellular Neuroscience (15)

Choose TWO OR THREE modules from:

Semester 1

BS3064 Comparative Neurobiology (15)

BS3054 Molecular and Cellular Pharmacology (15)

Semester 2

BS3033 Physiology, Pharmacology and Behaviour (15)

Semester total: 60 credits

Semester 2

Core module:

BS3016 Neuroscience Futures (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Biological Sciences (Neuroscience) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Medical Biosciences (Biochemistry)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

MB1080 An Introduction to Medical Bioscience (15)

Year 2

Semester 1

Core modules

BS2000 Research Topic (15)

MB2050 Medical Biochemistry (15)

Choose TWO OR THREE modules from:

Semester 1

BS2092 Molecular and Cell Biology

Semester 2

BS2093 Protein Control in Cellular Regulation (15)

BS2040 Bioinformatics (15)

Semester 1

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2030 Principles of Microbiology (15)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

Core module

BS2091 Biochemistry of Nucleic Acids (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology (15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

Semester total: 60 credits

MBiolSci Medical Biosciences (Biochemistry) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Plus core module:

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

Choose ONE OR TWO modules from:

Semester 1

BS3070 Structural Biology (15)

Semester 2

BS3003 Cancer Cell & Molecular Biology (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3000 Evolutionary Genetics (15)

BS3015 Molecular and Cellular Immunology (15)

BS3031 Human Genetics (15)

BS3054 Molecular & Cellular Pharmacology (15)

BS3055 Molecular and Cellular Neuroscience

BS3064 Comparative Neurobiology (15)

BS3068 Microbial Biotechnology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

Core module

MB3001 Biochemical Mechanisms of Human Disease (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

1 Module selection subject to timetable restrictions.

MBiolSci Medical Biosciences (Biochemistry) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Medical Biosciences (Genetics)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

MB1080 An Introduction to Medical Bioscience (15)

Year 2

Semester 1

Core module:

BS2000 Research Topic (15)

MB2051 Current Issues in Medical Genetics (15)

Choose TWO OR THREE modules from:

Semester 1

BS2009 Genomes (15)

Semester 2

BS2026 Genes, Development & Inheritance (15)

BS2040 Bioinformatics (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2032 Immunology and Eukaryotic Microbiology(15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Medical Sciences (Genetics) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Core modules

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Plus core modules

BS3031 Human Genetics (15)

BS3000 Evolutionary Genetics (15)

Semester total: 60 credits

Semester 2

Core modules:

MB3050 Medical Genetics (15)

BS3011 Microbial Pathogenesis and Genomics (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Medical Sciences (Genetics) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 6 BSc Exit award – Medical Biosciences (Microbiology)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

MB1080 An Introduction to Medical Bioscience (15)

Year 2

Semester 1

Core modules:

BS2030 Principles of Microbiology (15)

MB2020 Medical Microbiology (15)

BS2000 Research Topic (15)

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

BS2092 Molecular and Cell Biology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

Semester total: 60 credits

Semester 2

Core module:

BS2032 Immunology and Eukaryotic Microbiology(15)

OR

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2014 Exercise Physiology and Pharmacology (15)

BS2026 Genes, Development & Inheritance (15)

BS2040 Bioinformatics (15)

BS2066 Behavioural Neurobiology (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

Semester total: 60 credits

MBiolSci Medical Sciences (Microbiology) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Choose THREE OR FOUR modules from:

Semester 1

BS3015 Molecular and Cellular Immunology (15)

BS3068 Microbial Biotechnology (15)

Semester 2

BS3013 Human and Environmental Microbiomics (15)

BS3011 Microbial Pathogenesis and Genomics (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3000 Evolutionary Genetics (15)

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

BS3031 Human Genetics (15)

BS3054 Molecular & Cellular Pharmacology (15)

BS3055 Molecular & Cellular Neuroscience (15)

BS3064 Comparative Neurobiology (15)

BS3070 Structural Biology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

Core module:

MB3020 Advanced Topics in Medical Microbiology (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3016 Neuroscience Futures (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

BS3056 Cellular Physiology of the Cardiovascular System (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Medical Sciences (Microbiology) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 2

MBiolSci level 4, 5 and 7 BSc Exit award – Medical Biosciences (Physiology)

Year 1

Semester 1

BS1030 The Molecules of Life – An Introduction to Biochemistry and Molecular Biology (30)

BS1040 The Cell - An Introduction to Microbiology & Cell Biology (30)

Semester 2

BS1050 From Individuals to Populations - An Introduction to Genetics (15)

BS1060 Multicellular Organisation - An Introduction to Physiology, Pharmacology and Neuroscience (30)

MB1080 An Introduction to Medical Bioscience (15)

Year 2

Semester 1

Core modules:

BS2000 Research Topic (15)

Choose TWO OR THREE modules from:

Semester 1

BS2013 Physiology and Pharmacology (15)

BS2015 Physiology of Excitable Cells (15)

Semester 2

BS2014 Exercise Physiology and Pharmacology (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2009 Genomes (15)

BS2030 Principles of Microbiology (15)

BS2092 Molecular and Cell Biology (15)

BS2059 Global Change Biology and Conservation (15) (TO START IN 2019/20)

MB2020 Medical Microbiology (15)

Semester total: 60 credits

Semester 2

Core module:

MB2080 Pathophysiology of Disease (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS2004 Contemporary Techniques in Biological Data Analysis (15)

BS2026 Genes, Development & Inheritance (15)

BS2032 Immunology and Eukaryotic Microbiology(15)

BS2033 Immunology and Eukaryotic Microbiology (with Science Enterprise Trip) (15)

BS2040 Bioinformatics (15)

BS2077 Neurobiology & Animal Behaviour (15)

BS2091 Biochemistry of Nucleic Acids (15)

BS2093 Protein Control in Cellular Regulation (15)

BS2066 Behavioural Neurobiology

Semester total: 60 credits

MBiolSci Medical Biosciences (Physiology) with a Year in Industry (option)

Core module:

BS3400 Year in Industry Research Placement (0) (Year-long)

Year 3

Semester 1

Research Project: 30/45 credits.

Choose ONE from the following five options:

i) BS3101 Experimental Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

OR

ii) BS3201 Analytical Research Project (30)

OR

iii) BS3301 Education Research Project A (15) **and**

BS3302 Education Research Project B (30) (Year-long module)

OR

iv) BS3401 Steered Experimental Research Project (30) (TO START IN 2020/21)

OR

v) BS3501 Field Research Project A (15) **and**

BS3102 Experimental Research Project B (30) (Year-long module)

Choose THREE OR FOUR modules from:

Semester 1

BS3054 Molecular and Cellular Pharmacology (15)

BS3055 Molecular and Cellular Neuroscience (15)

Semester 2

BS3056 Cellular Physiology of the Cardiovascular System (15)

BS3033 Physiology, Pharmacology and Behaviour (15)

Semester 1

For semester 1, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3064 Comparative Neurobiology (15)

BS3000 Evolutionary Genetics (15)

BS3010 Gene Expression: Molecular Basis & Medical Relevance (15)

BS3015 Molecular & Cellular Immunology (15)

BS3031 Human Genetics (15)

BS3068 Microbial Biotechnology (15)

BS3070 Structural Biology (15)

NT3100 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

Semester 2

Core module:

MB3057 Understanding Disease – an Integrated Approach (15)

For semester 2, make the credits add up to 60 by choosing from the modules listed below: [1]

BS3003 Cancer Cell & Molecular Biology (15)

BS3011 Microbial Pathogenesis and Genomics (15)

BS3013 Human and Environmental Microbiomics (15)

BS3016 Neuroscience Futures (15)

BS3073 Conservation and Ecological Genetics (15)

BS3080 Behavioural Ecology (15)

NT3200 Sustainability Enterprise Partnership Project (15)

Semester total: 60 credits

[1] Module selection subject to timetable restrictions.

MBiolSci Medical Biosciences (Physiology) with a Year in Industry (option)

Core module:

BS4400 Year in Industry Research Placement (0) (Year-long)

Year 4

Level 7 Programme structure (programme regulations) appear in Appendix 1b

Appendix 1b Routes through the MBiolSci fourth year at Level 7

Fourth year programmes can only be taken in single 120 credit blocks as follows

There are six year 4 options available. Students will make decisions based on their interests and background in consultation with their Personal Tutor and the Programme Directors

Year 4 Option 1

Semester 1 core modules

BS4008 Core Laboratory Techniques (30)

BS4003 Research Methods in Cancer Biology (15)

BS4004 Advanced Topics in Cancer Biology (15)

Semester 2 core modules

BS4009 MBiolSci research project (60)

Year 4 Option 2

Semester 1 core modules

BS4008 Core Laboratory Techniques (30)

BS4212 Experimental Design and Applications of Molecular Genetic Techniques in Research (30)

Semester 2 core modules

BS4009 MBiolSci Research Project (60)

Year 4 Option 3

Semester 1 core modules

BS4008 Core Laboratory Techniques (30)

BS4402 Molecular Methods in Experimental Design (15)

Semester 2 core modules

BS4403 Cancer Therapeutics (15)

BS4009 MBiolSci Research Project (60)

N.B. To balance credits, the project submission deadline for Option 3 is a month later than the deadline for project modules in other MBiolSci options.

Year 4 Option 4

Semester 1 core modules

BS4008 Core Laboratory Techniques (30)

BS4309 Immunity, Infection & Chronic Disease (30)

Semester 2 core modules

BS4009 MBiolSci Research Project (60)

Year 4 Option 5

Semester 1 core modules

BS4601 Advanced research methods; Evaluating, Planning and Analysing Research (30)

BS4602 Professional Research Skills: Finding Your Path in the World of Research (30)

Semester 2 core modules

BS4009 MBiolSci Research Project (60)

Year 4 Option 6

Semester 1 core modules

BS4101 Gene and Genome Analysis (15)

BS4102 Proteins (15)

BS4105 Bioinformatics Programming and Advanced Topics in Bioinformatics (30)

Semester 2 core modules

BS4130	MBiolSci Research Project (Bioinformatics)	(60)

Appendix 2: Module specifications

See module specification database (Note - modules are organized by year of delivery) [login-required]