

Programme Specification

BSc Biomedical Sciences with Foundation

For students entering Foundation year in September 2023

UCAS Code: C742

UFBIOMEDFY

This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.

Awarding Institution	University of Reading
Teaching Institution	University of Reading
Length of Programme	4 years
Accreditation	

Programme information and content

The programme in Biomedical Sciences aims to provide students with the opportunity to study disease in humans by providing a fundamental background in molecular and cell Biology and Physiology, which is balanced with applied laboratory skills in Biochemistry, Microbiology, Physiology and Histology. The overall aims of the degree course in Biomedical Sciences are to provide a broad understanding of the biological basis of disease and concentrates on the interface between normal and abnormal biology. Emphasis is placed on sound understanding of Chemistry as a basis for the appreciation of the biological processes involved. Students will study the normal and pathological state at every level, from genes and enzymes through cells, tissues and whole animals. They will learn about the biology of pathogens and the interactions of these and other disease agents with the host.

During these studies, students will be exposed to a variety of information sources and techniques and be trained in various skills including those used in reasoning, argument and communication. Several transferable skills will be acquired, including the ability to design and execute experiments in the laboratory (including working in a team), access information, interpret data using statistics and computing, write essays, scientific papers and reports, and give oral and poster presentations.

Foundation year:	The Foundation Year provides you with the scientific background required to succeed on the subsequent years of the course. You will acquire a broad foundation in Biology (BIOBF1) and scientific calculations. Additionally, our Key Skills module gives you all the skills necessary to excel at University. The goal of Year 0 is to provide each student with basic core knowledge suitable for your chosen pathway and the confidence of transitioning to Higher Education.
Part 1:	Part 1 of our programme will teach you physiology, cell biology, biochemistry and microbiology. We will introduce you to the major diseases affecting mankind. You will gain practical experience in working in a laboratory, including experience of histology. There will be small group teaching of transferable and subject-specific skills, such as study skills, writing skills, mathematical skills, including statistics, computer literacy, and critical analysis

	of research and career management. If you do not have AS or A level Chemistry or an equivalent qualification, we will bring you up to AS level Chemistry.
Part 2:	In Part 2 our students will study Immunology, Molecular Genetics, Pharmacology, Toxicology and more cell biology. You will cover important infectious diseases. The diagnostic work of hospital pathology laboratories in terms of haematology, cytology and clinical biochemistry will be explored. Students will gain further experience of study, writing, mathematical, statistical, computer literacy, career skills and critical analysis. Additionally, they will gain skills and understanding relevant to Biomedicine, including practical skills, understanding of the social context of their subject and skills relevant to enhancing employability.
Part 3:	Our students in Part 3 will concentrate on the major causes of death in this country and worldwide, namely cardiovascular disease and cancer. They will also study medical genetics and neurobiology. Students will carry out a research project, which will be experimental, computer-based, a systematic review or a hypothesis driven literature review. In addition, students will be able to explore in-depth, specific areas of interest, through optional module selection.

Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

Foundation modules:

Module	Name	Credits	Level
BI0BF1	Foundation Programme: Biology	40	0
BI0MF1	Mathematics Foundation	20	0
IF0RAS	Foundation in Academic Skills	20	0

International Students take IF0ACA (Academic Skills), in place of IF0RAS (Foundation in Academic Skills), as IF0ACA is specifically targeted to the needs of international students.

Students will need to consult the Programme Director with regards to optional modules available and choice may be restricted by timetable constraints. Optional modules may include Chemistry, Environment Ecology & Sustainability and Psychology.

Part 1 Modules:

Module	Name	Credits	Level
BI1AP3	Anatomy and Physiology	20	4
BI1CMP1	Cellular and Molecular Principles of Life	20	4
BI1FB2	Fundamentals of Biochemistry	20	4
BI1FM1	Fundamentals of Microbiology	20	4

BI1HP2	Human Pathology	20	4
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The remaining 20 credits will be made up of an optional module from selected modules from the School of Biological Sciences or modules from an approved list, subject to timetabling constraints

Part 2 Modules:

Module	Name	Credits	Level
BI2CM1	Advanced Studies in Cellular and Molecular Biology	20	5
BI2HI1	Haematology and Immunology	20	5
BI2ID2	Infectious Diseases	20	5
BI2MG2	Medical Genetics	20	5
BI2RPS3	Research and Professional Skills	20	5

The remaining 20 credits will be made up of an optional module from selected modules from the School of Biological Sciences or modules from an approved list, subject to timetabling constraints

Modules during a placement year or study year (if applicable):

Students on the 5 year version of the programme will take one 120 credit module during their placement year. If you take the 5 year degree with Placement Year, you are required to undertake a compulsory placement as part of your Programme. You will be supported in finding this placement. If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

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Part 3 Modules:

Module	Name	Credits	Level
BI3RP3	Research Project	40	6
BI3VP1	Venoms and Poisons: from Pharmacology to Therapeutics	20	6

Students will need to choose at least two 20 credit modules from the School of Biological Sciences that discusses human diseases and disease mechanisms (such as cancer, cardiovascular biology or neuroscience). The remaining 20 credits will be made up of an optional module from selected modules from the School of Biological Sciences.

Optional modules:

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your programme can be found online in the Course Catalogue. Details of optional modules for each part, including any additional costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which they are to be taken and you will be given an opportunity to express interest in the optional

modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

Additional costs of the programme

You require a laboratory coat which you can bring with you or purchase from the University when you arrive (£12). If you undertake a Placement Year, associated costs will vary according to the nature and location of the placement and/or the study abroad host institution, and individual travel and subsistence arrangements. Costs are indicative, but will vary according to module choice and are subject to inflation and other price fluctuations.

The estimates were calculated in 2022.

Placement opportunities

You may be provided with the opportunity to undertake a credit-bearing placement as part of your Programme. This will form all or part of an optional module. You will be required to find and secure a placement opportunity, with the support of the University. You may have the opportunity to undertake a Study Abroad/Placement year during your Programme. This is subject to you meeting academic conditions detailed in the Programme Handbook, including obtaining the relevant permissions from your School, and the availability of a suitable Study Abroad placement. If you undertake a Study Abroad placement, further arrangements will be discussed and agreed with you.

Teaching and learning delivery:

You will be taught through lectures, seminars/tutorials, laboratory practicals and supervised project work.

Total study hours for each Part of your programme will be 1200 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of modules on this programme is Part 1 -312 hours, Part 2 - 300 hours, Part 3 - 288 hours. In addition to your scheduled contact hours, you will be expected to undertake guided independent study. Information about module contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

Accreditation details

Assessment

The programme will be assessed through a combination of written examinations and coursework, assessed via a range of methods.

Progression

The University-wide rules relating to 'threshold performance' as follows:

Part 0

- (i) an overall average of at least 40% over all modules taken in Part 0;
- (ii) no more than 40 credits of these modules with a mark below 35%;
- (iii) at least 40% in the Academic Skills module

BSc Biomedical Sciences with Foundation Specific Progression Requirements above Threshold.

In order to progress from Part 0 to Part 1 and be eligible for transfer to BSc Biomedical Sciences, a student must achieve a threshold performance; and

- (i) at least 40% in both the 20 credit Academic Skills (one of IFORAS, IF0ACA) and 20 credit subject skills (one of BI0MF1, PY0FIR, EN0SFS, PM0PHS) modules;

and achieve the following in the remaining 80-credits

- (i) at least 55% in BI0BF1 Foundation Programme: Biology;
- (ii) at least 50% in all modules

The achievement of a threshold performance at Foundation Year qualifies a student for a Certificate of Completion if they leave the University before completing the subsequent Part.

Part 1

To achieve a threshold performance at Part 1, a student will normally be required to:

- (i) Obtain an overall average of 40% over 120 credits taken in Part 1;
- (ii) Obtain a mark of at least 40% in individual modules amounting to not less than 80 credits taken in Part 1; and
- (iii) Obtain marks of at least 30% in modules amounting to 120 credits.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance.

The achievement of a threshold performance at Part 1 qualifies a student for a Certificate of Higher Education if they leave the University before completing the subsequent Part.

Part 2

To achieve a threshold performance at Part 2, a student shall normally be required to:

- (i) Obtain a weighted average of 40% over 120 credits taken in Part 2; and
- (ii) Obtain marks of at least 40% in individual modules amounting to at least 80 credits taken in Part 2; and
- (iii) Obtain marks of at least 30% in individual modules amounting to at least 120 credits, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3, a student must achieve a threshold performance.

The achievement of a threshold performance at Part 2 qualifies a student for a Diploma of Higher Education if they leave the University before completing the subsequent Part.

Professional/placement year

Students are required to pass the professional placement year/study abroad year in order to progress on the programme which incorporates the professional placement year/study abroad year. Students who fail the professional placement year/study abroad year transfer to the non-placement year version of the programme.

In order to be eligible for the BSc Biomedical Sciences with Foundation, students must meet the requirements described in Section 17 of the Assessment Handbook Bachelor's (for cohorts entering in 2022/23 and onwards) (see, in particular, section 17.5); and

- (i) must gain a mark of at least 40% in BI3RP3.

Classification

The University's honours classification scheme is based on the following:

Mark Interpretation

70% - 100% First class

60% - 69% Upper Second class

50% - 59% Lower Second class

40% - 49% Third class

35% - 39% Below Honours Standard

0% - 34% Fail

The weighting of the Parts/Years in the calculation of the degree classification is:

Three-year programmes

Part 2 one-third

Part 3 two-thirds

Four-year programmes, including placement year or study abroad:

Normally:

Part 2 one-third

Placement or Year Out - not included in classification

Part 3 two-thirds

The classification method is given in detail in:

Bachelor's (for cohorts entering in 2022/23 and onwards) (see, in particular, section 17.5)

For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <http://www.reading.ac.uk/module/>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.

BSc Biomedical Sciences with Foundation for students entering Foundation year in session 2023/24

21 July 2023

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