

Royal Holloway, University of London
Course specification for an undergraduate award
BSc Biomedical Sciences with Integrated Foundation Year (B99F)

Section 1 – Introduction to your course

This course specification is a formal document, which provides a summary of the main features of your course and the learning outcomes that you might reasonably be expected to achieve and demonstrate if you take full advantage of the learning opportunities that are provided. Further information is contained in the University prospectus, and in various handbooks, all of which you will be able to access online. Alternatively, further information on the University's academic regulations and policies can be found [here](#). Further information on the University's Admissions Policy can be found [here](#).

Your degree course in Biomedical Sciences with an Integrated Foundation Year is delivered in four stages, each of which comprises one year of full-time study, or two years of part-time study, during which you must follow modules to the value of 120 credits. The curriculum is based around a core set of mandatory modules and the course offers a strong foundation in Stages one and two, which covers the requirements of the benchmarking statements in Biosciences and Biomedical Sciences and allows for specialisation in Stage three, while at the same time allowing some degree of diversification of interests.

"Year 0", the Foundation Year, prepares you for university study by offering a rigorous introduction to university level study methods and skills transitioning from FHEQ level 3 to FHEQ level 4. It provides progressive structures in which you are able to gain ever-wider knowledge and understanding of approaches to scientific study and your chosen degree subject, together with embedded practice and study skills, leading towards increasingly discipline specific activities in the practical laboratories or individual project modules which facilitate greater levels of specialisation and individual choice. The modules are assessed by a mixture of coursework, written and practical exams.

Stage one comprises a fixed selection of mandatory modules and seeks to provide the necessary grounding for the study of the subject at degree level with appropriate Biochemistry, Cell Biology, Chemistry, Genetics, and Physiology and including a strong element of laboratory training that forms the cornerstone of the subject. In **Stage two** you take 5 mandatory modules to the value of 75 credits in Physiology, Molecular Biology, as well as molecular studies of biomedical subjects such as Immunology, Neurology and Pharmacology and select optional modules that include Microbiology, Developmental Biology, Cell Dynamics and Bioenergetics and Metabolism. Stage two builds on the foundations laid in Stage one and provides a basis for the study of the research-led specialist options in Stage three. All the modules include a substantial element of laboratory training that prepares you for the selection and implementation of the individual research project in stage three. In **Stage three** there are 2 mandatory modules to the value of 45 credits, which are the Molecular Basis of Inherited Disease modules and the individual research project. The final year project is regarded as your graduate capstone experience, as it is the culmination of your training in experimental design, research techniques, data analysis and presentation. You select the remaining modules from options. Many of the modules specialise in medically oriented aspects of the subject, and have a strong element covering specific categories of disease, their underlying cause and treatment. The options include Clinical Physiology and Medicine, Clinical Diagnosis of Disease, Biology of Parasitic Diseases, Cell and Molecular Neuroscience, Human Embryology and others. Clinicians and other hospital experts contribute to several of the final year modules, providing teaching at the cutting-edge of clinical approaches and expertise.

The course emphasises the importance and relevance of a wide range of subject areas for medicine and the understanding and scientific investigation of human disease. It also involves training in a variety of practical techniques and skills relevant to research work in Biomedical Sciences. The system is also flexible and allows you to transfer to other degree streams within the Department up to the start of the second term, or indeed to other Molecular Bioscience degrees up to the start of the second stage. You can also take up to 30 credits from outside the Department of Biological Sciences, but within other Science departments, during stage two/three. Options are selected in consultation with your Personal Tutor and the Director of Teaching/Department Lead in UG Education.

While Royal Holloway keeps all the information made available under review, courses and the availability of individual modules, especially optional modules are necessarily subject to change at any time, and you are therefore advised to seek confirmation of any factors which might affect your decision to follow a specific course. In turn, Royal Holloway will inform you as soon as is practicable of any significant changes which might affect your studies.

The following is a brief description for some of the most important terminology for understanding the content of this document:

Degree course – May also be referred to as 'degree programme' or simply 'programme', these terms refer to the qualification you will be awarded upon successful completion of your studies.

Module – May also be referred to as 'course', this refers to the individual units you will study each year to complete your degree course. Undergraduate degrees at Royal Holloway comprise a combination of modules in multiples of 15 credits to the value of 120 credits per year. On some degree courses a certain number of optional modules must be passed for a particular degree title.

| Section 2 – Course details | | | |
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| Date of specification update | March 2024 | Location of study | Egham Campus |
| Course award and title | BSc Biomedical Sciences with Integrated Foundation Year | Level of study | Undergraduate |
| Course code | 3675 | UCAS code | B99F |
| Year of entry | 2024/25 | | |
| Awarding body | Royal Holloway, University of London | | |
| Department or school | Department of Biological Sciences School of Life Sciences and the Environment | Other departments or schools involved in teaching the course | IFY: Centre for the Development of Academic Skills (CeDAS) |
| Mode(s) of attendance | Full-time Part-time | Duration of the course | 4 years or 7 years (if studying part time). Stages 1-3 are available in part-time mode. |
| Accrediting Professional, Statutory or Regulatory Body requirement(s) | You must pass the BS3010 Individual Research Project in order to qualify for an Honours Degree in Biomedical Sciences; this is a requirement of the Royal Society of Biology for an accredited degree. | | |
| Link to Coursefinder for further information: | https://www.royalholloway.ac.uk/studying-here/ | For queries on admissions: | https://royalholloway.ac.uk/applicationquery |

| Section 3 – Degree course structure | | | | | |
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| 3.1 Mandatory module information | | | | | |
| The following table summarises the mandatory modules which students must take in each year of study | | | | | |
| Year | Module code | Module title | Credits | FHEQ level | Module status (Mandatory Condonable MC or Mandatory Non-Condonable MNC) |
| 0 | FY1001 | Global Perspectives and Academic Practices 1 | 15 | HE Level 0 | MC |
| 0 | FY1002 | Global Perspectives and Academic Practices 2 | 15 | HE Level 0 | MC |
| 0 | FY1009 | Foundation Programming | 15 | HE Level 0 | MC |
| 0 | FY0012 | Foundation Life Sciences and the Environment | 15 | HE Level 0 | MC |
| 0 | FY0013 | Foundation Mathematics for Life Sciences | 15 | HE Level 0 | MC |
| 0 | FY0014 | Foundation Statistics for Life Sciences | 15 | HE Level 0 | MC |
| 0 | BS0998 | Foundation Practical Skills (Biological Sciences) | 15 | HE Level 0 | MC |
| 0 | BS0999 | Foundation Project (Biological Sciences) | 15 | HE Level 0 | MC |
| 1 | BS1021 | Becoming a Bioscientist | 15 | 4 | MC |
| 1 | BS1031 | Chemistry of Life | 15 | 4 | MC |
| 1 | BS1032 | Fundamental Biochemistry | 15 | 4 | MC |
| 1 | BS1061 | Introductory Animal Physiology | 15 | 4 | MC |
| 1 | BS1062 | Introduction to Human Physiology in Health and Disease | 15 | 4 | MC |
| 1 | BS1071 | Cell Biology and the Origin of Life | 15 | 4 | MC |
| 1 | BS1072 | Genetics | 15 | 4 | MC |
| 1 | BS1091 | Protein Biochemistry and Enzymology | 15 | 4 | MC |

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| 2 | BS2050 | Human Physiology in Health and Disease II | 15 | 5 | MC |
| 2 | BS2530 | Molecular Biology | 15 | 5 | MC |
| 2 | BS2540 | Immunology | 15 | 5 | MC |
| 2 | BS2550 | Neuronal and Cellular Signalling | 15 | 5 | MC |
| 2 | BS2560 | Pharmacology and Toxicology | 15 | 5 | MC |
| 3 | BS3010 | Individual Research Project | 30 | 6 | MNC |
| 3 | BS3590 | Molecular Basis of Inherited Disease | 15 | 6 | MC |

This table sets out the most important information for the mandatory modules on your degree course. These modules are central to achieving your learning outcomes, so they are compulsory, and all students on your degree course will be required to take them. You will be automatically registered for these modules each year. Mandatory modules fall into two categories: 'condonable' or 'non-condonable'.

In the case of mandatory 'non-condonable' (MNC) modules, you must pass the module before you can proceed to the next year of your course, or to successfully graduate with a particular degree title. In the case of mandatory 'condonable' (MC) modules, these must be taken but you can still progress or graduate even if you do not pass them. Please note that although Royal Holloway will keep changes to a minimum, changes to your degree course may be made where reasonable and necessary due to unexpected events. For example: where requirements of relevant Professional, Statutory or Regulatory Bodies have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of external advisors, to enhance academic provision.

3.2 Optional modules

In addition to mandatory modules, there will be a number of optional modules available during the course of your degree. Although Royal Holloway will keep changes to a minimum, new options may be offered, or existing ones may be withdrawn. For example, where reasonable and necessary due to unexpected events, where requirements of relevant Professional, Statutory or Regulatory Bodies (PSRBs) have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of External Advisors, to enhance academic provision. There may be additional requirements around option selection; please contact the Department for further information.

Year 0 – all modules are mandatory.

Year 1 – all modules are mandatory.

During year two, you must choose options equal to the value of 45 credits from a list of stage two modules offered by the Department.

During year three, you must choose options equal to the value of 75 credits from a list of FHEQ level 6 modules offered by the Department.

Section 4 - Progressing through each year of your degree course

For further information on the progression and award requirements for your degree, please refer to Royal Holloway's [Academic Regulations](#).

Progression throughout the year/s is monitored through performance in summative or formative coursework assignments. Please note that if you hold a Student Visa and you choose to leave (or are required to leave because of non-progression) or complete early (before the course end date stated on your CAS), then this will be reported to UKVI.

To progress from the Foundation Year to Year One you must achieve a stage average of at least 40% and either pass 120 credits or pass modules to the value of between 90-105 credits achieve a Fail outcome of at least 30% in the remaining credits. Opportunities for resits are detailed in the [Academic Regulations](#)

All first-year undergraduate students are required to take and pass the non-credit bearing Moodle-based Academic Integrity module SS1001 to progress into the second year of study (unless their course includes the alternative mandatory SS1000 module). The pass mark for the module assessment is stated in the on-line Academic Integrity Moodle module. Students may attempt the assessment as often as they wish with no penalties or capping. Students who meet the requirements for progression as stipulated in the [University's Undergraduate Regulations](#) (Section: Conditions for progression to the next stage) but fail to pass the Moodle-based Academic Integrity module will not be permitted to progress into their second year of academic study at the University.

Part-time study:

Year 0

The Foundation Year is not available for part-time study.

Stage one (a):

BS1021 Becoming a Bioscientist (15 credits; condonable)

BS1031 Chemistry of Life (15 credits; condonable)

BS1032 Fundamental Biochemistry (15 credits; condonable)

BS1061 Introductory Animal Physiology (15 credits; condonable)

Stage one (b):

BS1071 Cell Biology and the Origin of Life (15 credits; condonable)

BS1072 Genetics (15 credits; condonable)

BS1062 Introduction to Human Physiology in Health and Disease (15 credits; condonable)

BS1091 Protein Biochemistry and Enzymology (15 credits; condonable)

Stage two (a)

BS2050 Human Physiology in Health and Disease II (15 credits; condonable)

BS2530 Molecular Biology (15 credits; condonable)

and choose two options (30 credits) from the Stage two modules listed above.

Stage two (b)

BS2540 Immunology (15 credits; condonable)

BS2550 Neuronal and Cellular Signalling (15 credits; condonable)

BS2560 Pharmacology and Toxicology (15 credits; condonable)

and choose one option (15 credits) from the Stage two modules listed above.

Stage three (a)

BS3010 Individual Research Project (30 credits) [Non-condonable – must be passed to qualify for specific field of study].

BS3590 Molecular Bases of Inherited Disease (15 credits; condonable)

and choose a 15 credit options from the stage three modules listed above

Stage three (b)

Options from the stage three modules listed above.

Section 5 – Educational aims of the course

For the Foundation Year:

- to develop the mathematical and scientific skills needed for level 4 study in Biological and Earth Sciences;
- to equip you with the basic experimental, programming or practical techniques required for scientific degrees;
- to start the process of process of independent project work in science with support of expert academics;
- to put in context scientific knowledge and developments into a wider context of history, society and globalisation.

The aims of the Honours Degree course in Biomedical Sciences are to:

- provide, through a core of modules, a sound knowledge and understanding of those areas of Bioscience necessary for understanding the biology of diseases and the scientific investigation of human health and disease. These include biochemistry, cell biology, genetics, molecular biology, physiology and anatomy, and pharmacology;
- provide a sound knowledge and understanding of those areas of the subject relevant to the diagnosis and development of therapies for a range of diseases;
- develop an insight into the current frontiers of knowledge in major aspects of the Biomedical Sciences, primarily through a series of specialised Stage 3 modules;
- develop, through a flexible and progressive structure, a range of subject-specific and transferable skills, including practical laboratory skills, self-management, information retrieval, communication and presentation skills, working with others, decision making and meeting deadlines, that equip you for future employment:
- provide experience of independent research through a final year project;
- produce graduates who can work safely and responsibly with biological and chemical materials and laboratory equipment.

| Section 6 - Course learning outcomes | | | | | |
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| In general terms, the courses provide opportunities for students to develop and demonstrate the following learning outcomes. (<i>Categories – Knowledge and understanding (K), Skills and other attributes (S), and Transferable skills (*)</i>) | | | | | |
| Theme | Course learning outcome | Level 3 | Level 4 | Level 5 | Level 6 |
| 1. Graduates from this course will demonstrate KNOWLEDGE and CURIOSITY | <p>Describe and discuss the key biological concepts and phenomena relevant to the Biomedical Sciences, from molecular to cellular, and from health to disease, and to do so confidently, accurately and in detail, using appropriate terminology.</p> <p>Be aware of the historical context, ethical issues, and societal impacts of advances in Biomedical Sciences and appreciate the contribution of the field to the innovations that characterise the modern world and their potential future impact.</p> | Demonstrate understanding of fundamental concepts in the subjects that underpin the study of biology, including maths. | <p>Recall basic knowledge of key biological concepts in the subjects that underpin the understanding of bodily function and human disease, including chemistry, biochemistry, cell biology, genetics, and physiology.</p> <p>Demonstrate an appreciation of the historical context of subjects in the field and the global reach of the Biomedical Sciences, the impact on human life and the environment and the ethical considerations implicit in their application.</p> | <p>Explain biomedical sciences phenomena in the human body in health and disease at molecular, cellular, organ and system levels, and explain how these systems function both biologically and clinically.</p> <p>Recognise the relationships and interfaces between Biomedical Sciences and other subjects, enabling efficient interactions in a multidisciplinary environment, and identify and discuss the application of Biosciences to solving current and future challenges in the world.</p> | <p>Apply a comprehensive knowledge of concepts and phenomena in Biomedical Sciences including the molecular and cellular basis of a range of human diseases and disorders and the complexity of bodily function and demonstrate evidence of enquiry beyond this.</p> <p>Critically assess the merits of contrasting subject-specific theories, paradigms, concepts, and principles, and develop a reasoned argument to support their position on a topic using evidence from a range of published articles.</p> <p>Engage with philosophical and ethical debates arising from current advances in the biosciences and their impact on society.</p> <p>Demonstrate awareness of the cutting-edge developments in the field and relevant interdisciplinary activity and the potential of Biomedical Sciences graduates to develop solutions to current and future challenges.</p> |

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| <p>2. Graduates from this course will demonstrate PRACTICAL SKILLS and RISK AWARENESS</p> | <p>Select and carry out appropriate quantitative and qualitative practical, laboratory and computational techniques to solve problems relevant to the course, including consideration of the theoretical basis and limitations of various techniques, and be able to work safely with an awareness of the associated risks.</p> | <p>Demonstrate individual competency in a range of basic practical techniques relevant to the course.</p> | <p>Demonstrate individual competency in a selection of appropriate practical techniques relevant to the course.</p> <p>Recognise Good Laboratory Practice and record data accurately.</p> <p>Follow instructions to work safely and demonstrate awareness of the relevant risk factors involved in both biological and chemical laboratory activities.</p> | <p>Demonstrate individual competency in a broad range of appropriate qualitative and quantitative practical laboratory techniques and discuss their theoretical basis and limitations.</p> <p>Follow Good Laboratory Practice in the planning, performance and recording of results.</p> <p>Follow standard operating procedures to enact safe working practices whilst understanding the relevant risks from biological and chemical factors and how to mitigate them.</p> | <p>Design an approach and use appropriate practical techniques and skills to address the aims of a research project or investigation, whilst discussing the limitations of the techniques and suggesting alternatives.</p> <p>Implement Good Laboratory Practice in the way experiments are planned, performed, monitored, recorded, reported, and retained.</p> <p>Independently produce and apply risk assessments for completing project work in a safe and reliable manner, including identification of relevant risks from biological, chemical, laboratory or field-based work.</p> |
| <p>3. Graduates from this course will be able to DESIGN EXPERIMENTS AND ANALYSE DATA</p> | <p>Apply knowledge and understanding of biological systems and methodologies to design experiments and to solve theoretical and practical problems, with awareness of appropriate controls, possible bias, ethics, and sustainability.</p> <p>Collect qualitative and quantitative data from investigations relevant to the course and analyse and interpret these data to</p> | <p>Follow instructions to carry out simple experiments, record data accurately and perform appropriate analysis and presentation of results.</p> | <p>Design simple experiments and consider appropriate controls and sources of possible bias.</p> <p>Record data accurately and perform appropriate data analysis and presentation of results.</p> <p>Carry out numerical calculations and statistical analyses as appropriate in the Biomedical Sciences and interpret the outcomes.</p> | <p>Devise and evaluate solutions to solve both routine and unfamiliar problems using a range of methods, and demonstrate awareness of appropriate controls, possible bias, ethics, and sustainability.</p> <p>Record data accurately and apply appropriate methods for analysis using numerical calculations, Excel spreadsheets, bioinformatic analysis, and other computational techniques.</p> | <p>Discuss the application of techniques in biochemistry, cell biology, molecular biology and molecular genetics to understanding the causes, diagnosis and treatment of human diseases and evaluate the development of novel therapeutic intervention strategies.</p> <p>Demonstrate independent and accurate data collection in the project, including selection of appropriate numerical, statistical, bioinformatic and computational methods for analysis.</p> |

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| | <p>allow testing of hypotheses, contextualisation of findings, presentation of results, and suggestions for further lines of investigation.</p> <p>Deploy mathematical and statistical concepts, processes and tools, such as the manipulation of equations and graphical and statistical analysis, to solve problems or evaluate data.</p> | | <p>Reflect on practical outcomes in terms of the quality of results obtained.</p> | <p>Present results clearly using appropriate terminology and interpret data with relevant statistical analyses to test hypotheses.</p> <p>Critically assess the quality of evidence obtained and make suggestions for improvement.</p> <p>Place the work in context by integrating relevant information from the scientific literature and suggest further lines of investigation.</p> | <p>Present and evaluate data effectively, interpret findings, make and test hypotheses, make decisions, and consider further lines of investigation with a thorough understanding of the context within the field.</p> <p>Evaluate the evidence base for scientific claims in the primary literature by commenting on the adequacy of the methods, data, and interpretation.</p> |
| <p>4. Graduates from this course will demonstrate RESEARCH SKILLS and the ability to EVALUATE LITERATURE</p> | <p>Complete independent open-ended investigative work through a project/research-based assignment relevant to the course and demonstrate the ability to think independently, work autonomously and solve problems.</p> <p>Engage with literature from the Biomedical Sciences to develop insight into the subject and to stay up to date with advances in the field, including aspects of sustainability, while appreciating the fluid</p> | <p>Use search strategies to identify published work relevant to a topic and use this to enhance knowledge.</p> | <p>Generate a solution to a task by following instructions or using ideas borrowed from elsewhere.</p> <p>Use search strategies to identify published scientific articles relevant to a topic.</p> <p>Apply a variety of methods of study in investigating, recording and analysing material.</p> <p>Demonstrate the ability to appropriately cite and reference source materials.</p> | <p>Assemble and apply information from different sources to address a problem and formulate a solution through independent effort or teamwork.</p> <p>Access and evaluate information from a wide range of sources such as texts, published journal articles, reports and clinical data and demonstrate the ability to put that information into context.</p> <p>Demonstrate critical and analytical skills, including a recognition that statements and hypotheses.</p> | <p>Plan, execute and present an independent piece of work which includes analysis or evaluation of data within a supported framework, and demonstrate evidence of time management, problem-solving, and independence.</p> <p>Create solutions to problems using imaginative, creative, or innovative approaches, either independently or with teamwork, and employ appropriate databases, computational techniques and tools.</p> <p>Demonstrate well-developed strategies for updating, maintaining, and enhancing their knowledge of the biosciences, synthesise information from different sources,</p> |

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| | <p>nature of knowledge that evolves as new findings emerge.</p> <p>Use appropriate databases, computational techniques and tools to aid further understanding and insight of Biomedical Sciences processes, and to innovate and solve problems creatively in a digital world.</p> | | | <p>should be tested, and that evidence is subject to assessment and critical evaluation.</p> <p>Sort, filter, abstract, evaluate and synthesise information from a range of sources to produce a written body of work with complete and accurate citations and references.</p> | <p>and generate hypotheses based on current data while acknowledging that our understanding continues to evolve as new findings emerge.</p> <p>Assess the quality of evidence from different sources by evaluating the context, aims, objectives, experimental design, methodology, data interpretation and application of the study.</p> |
| <p>5. Graduates from this course will demonstrate PROFESSIONAL SKILLS AND BEHAVIOURS</p> | <p>Act professionally, with due regard for legal, ethical, and societal responsibilities, modelling good practice that promotes positive perceptions of the Biomedical Sciences and Biomedical Scientists including working successfully in a group environment, contributing positively and flexibly to team outputs.</p> | <p>Interact with others in groups and understand the importance of inclusive working practices.</p> | <p>Interact with others in groups and understand the importance of inclusive working practices.</p> <p>Recognise the importance of effective communication within a team and demonstrate consideration of the views of others.</p> <p>Recognise and apply the principles and codes of practice that underpin personal and professional integrity and standards.</p> <p>Reflect on their progress from feedback provided.</p> | <p>Work with others in groups and demonstrate inclusive working practices.</p> <p>Communicate effectively with all members of a team and demonstrate consideration of the views of others and social intelligence.</p> <p>Demonstrate personal integrity and self-awareness of the ethical approach to their work.</p> <p>Reflect on their progress from feedback provided and apply comments on areas of improvement to further pieces of work.</p> | <p>Collaborate with others to work in an effective team by coordinating to exchange information and tackle problems.</p> <p>Demonstrate leadership to help drive a project forwards, inspiring, and motivating others.</p> <p>Demonstrate an understanding of how to identify, protect and exploit intellectual property (IP) as part of the scientific innovation process.</p> <p>Evaluate their development of intellectual and transferable skills, for demonstration to employers.</p> <p>Demonstrate resilience and initiative to overcome problems or respond to changes in circumstance.</p> |
| <p>6. Graduates from this course will demonstrate</p> | <p>Communicate effectively, selecting appropriate content, media and</p> | <p>Produce short written and verbal reports that transfer</p> | <p>Generate short written reports that transfer key</p> | <p>Produce written reports in Word or similar software to convey the outcomes of</p> | <p>Create substantial written reports that effectively explain the results of data analysis for a scientific</p> |

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| COMMUNICATION SKILLS and DIGITAL LITERACY | methods for the audience, purpose, and subject. | key information to a peer group. | information to non-scientists. Give a short verbal presentation on a science topic for a peer group, using PowerPoint or similar software for visual aids. Demonstrate knowledge of fundamental topics for biomedical sciences through succinct written (or verbal) answers to exam questions. | practical work for a scientific audience. Create and deliver a verbal presentation on a science topic for a peer group, using PowerPoint (or similar) to produce high quality visual aids. Demonstrate detailed knowledge of topics in biomedical sciences through focussed and accurate written answers to exam questions and be able to defend knowledge verbally. | audience, and which communicate information synthesised from published papers in a way that is organised, topical and recognises the limits of current hypotheses. Use creative approaches to design materials that convey key scientific information to scientific or non-scientific audiences. Give a clear, current, and accurate account of the subject area, and critically discuss and debate both with specialists and non-specialists, using appropriate scientific language. |
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Section 7 - Teaching, learning and assessment

The overall strategy is to provide a progressive approach to biological concepts and systems of increasing complexity that underpin Biomedical Sciences and that are directly relevant to the understanding and treatment of human disease. This strategy is realised through a range of teaching methods that aid learning and stimulate interest. Specific knowledge of the molecular, cellular and biochemical bases of diseases, their diagnosis and treatment are developed through a range of specialist final stage modules dealing with particular types of disease, e.g. the molecular basis of inherited disease, the biochemical diagnosis of disease, neurological disorders (cell and molecular neuroscience). Teaching is mostly by means of lectures, laboratory classes, computer exercises, seminars, tutorials, study/revision sessions, with knowledge and understanding further developed by guided independent study.

Learning and analytical ability are developed and reinforced through problem solving, essay writing, laboratory classes, critical evaluation and by giving you the opportunity to design, execute and evaluate their own experiments. You are encouraged to acquire further knowledge beyond taught material, e.g. by reading topical reviews, original research literature and attending research seminars, especially in the final year.

The practical assignments associated with first year and second year modules provide training in a range of subject specific laboratory techniques, including safety assessment. The culmination of these skills is demonstrated in the final year research project, and for literature skills the preparation of a literature report. You have to prepare your own risk assessment prior to commencing your final year project work.

Training in intellectual and key transferable skills is embodied throughout the course and forms a strong element of the tutorial and study session programmes. You are required to meet basic standards in information technology.

Assessment is typically by formal unseen written examinations, practical exams, and a range of coursework assignments such as essays, laboratory reports, oral and poster presentations, and the individual research project. Full details of the assessments for individual modules can be obtained from the Department. Contact hours come in various forms and may take the form of time spent with a member of staff in a lecture or seminar with other students. Contact hours may also be laboratory or, studio-based sessions, project supervision with a member of staff, or discussion through a virtual learning environment (VLE). These contact hours may be with a lecturer or teaching assistant, but they may also be with a technician, or specialist support staff.

The way in which each module on your degree course is assessed will also vary. Assessments designated as 'summative' will receive a mark which will count towards your overall mark for the module, and potentially your degree classification, depending on your year of study. On successful completion of the module you will gain the credits listed.

More detailed information on modules, including teaching and learning methods, and methods of assessment, can be found via the online [Module Catalogue](#). The accuracy of the information contained in this document is reviewed regularly by the university, and may also be checked routinely by external agencies.

Section 8 – Additional costs

There are no single associated costs greater than £50 per item on this degree course.

These estimated costs relate to studying this particular degree course at Royal Holloway. General costs such as accommodation, food, books and other learning materials and printing etc., have not been included, but further information is available on our website.

Section 9 – Indicators of quality and standards

QAA Framework for Higher Education Qualifications (FHEQ) Level

4-6

Your course is designed in accordance with the FHEQ to ensure your qualification is awarded on the basis of nationally established standards of achievement, for both outcomes and attainment. The qualification descriptors within the FHEQ set out the generic outcomes and attributes expected for the award of individual qualifications. The qualification descriptors contained in the FHEQ exemplify the outcomes and attributes expected of learning that results in the award of higher education qualifications. These outcomes represent the integration of various learning experiences resulting from designated and coherent courses of study.

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| QAA Subject benchmark statement(s) | http://www.qaa.ac.uk/quality-code/subject-benchmark-statements |
| Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of courses in a specific subject or subject area. They also represent general expectations about standards for the award of qualifications at a given level in terms of the attributes and capabilities that those possessing qualifications should have demonstrated. | |

| Section 10– Intermediate exit awards (where available) | | |
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| You may be eligible for an intermediate exit award if you complete part of the course as detailed in this document. Any additional criteria (e.g. mandatory modules, credit requirements) for intermediate awards is outlined in the sections below. | | |
| Award | Criteria | Awarding body |
| Diploma in Higher Education (DipHE) | Pass in 210 credits of which at least 90 must be at or above FHEQ Level 4 and at least 120 of which must be at or above FHEQ Level 5 | Royal Holloway and Bedford New College |
| Certificate in Higher Education (CertHE) | Pass in 120 credits of which at least 90 must be at or above FHEQ Level 4 | Royal Holloway and Bedford New College |