



School of Biological Sciences
Undergraduate Studies

Royal Holloway
University of London



Royal Holloway University of London

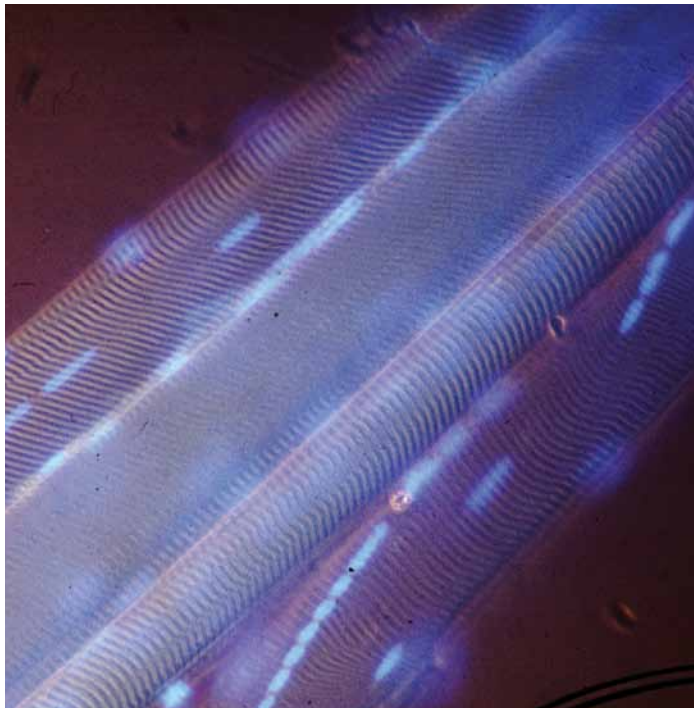


Royal Holloway is widely recognised on the world stage as one of the UK's leading teaching and research university institutions. One of the larger colleges of the University of London, we are strong across the sciences, social sciences, arts and humanities. Our 8,500 students work with internationally renowned scholars in 18 academic departments. The University of London degree gained by our talented, high-achieving graduates is valued the world over.

As a cosmopolitan community, with students from 130 countries, we focus on the support and development of the individual. Our friendly campus, just 19 miles west of central London, provides a unique environment for university study. Campus life revolves around the Students' Union, which runs over 100 societies and sports clubs, and we are recognised as London's best sporting college.

We are one of the highest ranking Biological Science departments in the UK, awarded the top rating for teaching. Our research is at the forefront of scientific discovery and in the latest Research Assessment Exercise (RAE 2008), we were placed as the leading department in London and the South East.

We have long been recognised as providing a friendly yet challenging place to study this exciting and fast-moving subject. Here you will be taught by, and work with internationally respected scientists using first class facilities.



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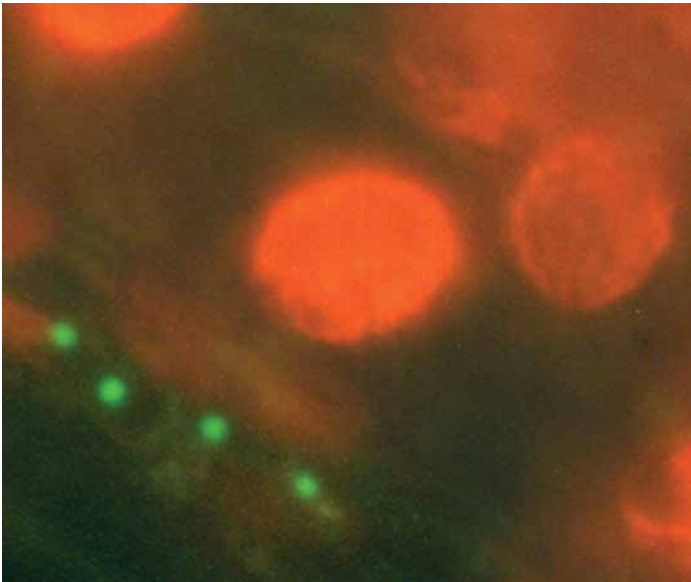
This brochure is designed to complement Royal Holloway's Undergraduate Prospectus and information on the Department's website at www.rhul.ac.uk/Biological-Sciences/

It is also available as a PDF at www.rhul.ac.uk/

Why study Biological Sciences?

Biological Sciences is a richly fascinating and vibrant subject, shedding new light on some of the most fundamental issues in today's world. Understanding the structure and complexity of the natural world around us is central to the maintenance of life on this planet, whilst making important advances in our ability to treat illness and disease will help improve the quality of life for people the world over.

You can be a part of our scientific future through research, but the knowledge gained from a Biological Sciences degree will equip you for a wide range of careers. Transferable skills, including training in numeracy, scientific and popular writing, literature use, presentations, logical thinking and debate are embedded within all of our degrees.



Biological Sciences at Royal Holloway

- **A degree from the University of London**, one of the most prestigious in the world, without the expense of living in the city. Our attractive, self-contained campus is so green that the ecologists use it for fieldwork in teaching and research.
- **An international reputation** for the quality of our teaching and research. In the last Teaching Quality Assessment we scored a maximum 24 points and for research we are rated as the 6th Department in the UK and the top in London.
- **Flexible degree structure**: If you are undecided as to what degree you will finally take, our flexible degree structure allows you to keep your options open. You can change your course within the 'organismal' or 'molecular' portfolios right up to the start of the second year, providing the degree you change to is not oversubscribed.
- **Transferable skills**: You learn a wide range of skills during the degree, which will serve you well irrespective of whether you go into a career within or outside Biological Sciences.
- **First-class facilities**: State-of-the-art mass spectrometry, proteomics and metabolomics facilities, marine and freshwater aquaria, plant and animal cell culture, glasshouses, and an electrophysiology suite. We have access to extensive areas of natural habitat for fieldwork and are close to sites of national scientific importance, such as Windsor Great Park, Box Hill and Chobham Common.
- **Strong support network**: An exceptionally friendly and welcoming environment. Because of our high staff-student ratio, we can offer teaching in small groups, even one-to-one when the need arises.
- **Financial help**: We offer Bioscience Entrance Scholarships for students of outstanding ability. These are worth up to £1,000 along with a guaranteed place in a hall of residence for all three years of your degree.
- **Excellent career prospects**: We have a strong track record of high-achieving graduates well prepared for future employment. Over the past five years, 97% of our graduates have been placed in positions requiring a degree within six months of graduating.

Welcome

Thank you for considering studying Biological Sciences at Royal Holloway. We offer a diverse range of courses, backed up by our specialist expertise and research in topics ranging from gene therapy, tropical diseases, GM technology, neuroscience, vaccine technology, and systems biology to animal behaviour, conservation ecology and biodiversity.

Internationally-recognised for the quality of its teaching and research, the School is an exciting and friendly place to study. Our students have access to extensive facilities and equipment and are guided in their studies by enthusiastic staff who are leading authorities in their field. Designed to inspire and challenge, our degree programmes will provide you with a strong foundation for a variety of rewarding careers or further study.

Why not come and find out for yourself? I warmly invite you to visit us and look forward to meeting you at one of the UCAS or College Open Days, held throughout the year.

Professor Alan Gange

Head of School



Admissions and entry requirements

All applications should be made through UCAS (www.ucas.ac.uk). On receipt of your UCAS application form, we carefully read your personal statement, academic reference and academic performance to date. If we are considering making you an offer, we will invite you for interview. We understand that some candidates, especially from overseas, may not be able to attend. If this is the case, our decision will be based on the information supplied on the form.

We run an interactive day for candidates, designed to give you a real idea of what life is like here. We show you the campus and the School of Biological Sciences, give you a presentation about our teaching and research, and have you take part in a laboratory exercise. The latter is not assessed and is intended to be informative and fun! Finally, you will have an interview with a member of academic staff. Parents and relatives are welcome to attend this day; there is a special presentation for them.

After the interview, a decision will be made on your application, and any offer we make will be one which we think you can realistically achieve. We do this so that if you accept our offer, it is likely that you will obtain the requirements and hence be spared the UCAS clearing process.

If you cannot attend any of our interview days, but would still like to see the School before you make a decision, you are welcome to

come for a personal visit. Contact the Admissions Tutor to arrange a suitable date. You can also attend one of the College's Open Days (see page 13).

Taking a gap year

We are happy to accept applicants who wish to defer entry for a year. We will consider you for entry in the normal way and if you meet the conditions of our offer, we will guarantee your place for the following year. Alternatively, you can apply during your gap year, having already obtained your results.

Part-time study

Most of our degrees are available to study part-time over six years. Part-time students apply directly to the College, not through the UCAS system.

Admissions policy

Every student has a right to have their application considered seriously, fairly and efficiently. You are entitled to a selection procedure that operates fairly for all applicants regardless of ethnic or religious background, age, gender or sexual orientation and which takes account of special needs to the extent that the College's resources allow.



Degree structure

We offer seven Single Honours BSc degree programmes and one joint Honours programme. These are grouped under two broad divisions, of Molecular and Organismal Bioscience:

Molecular Bioscience Degrees

- B990 Biomedical Sciences
- C700 Biochemistry
- C701 Molecular Biology
- C741 Medical Biochemistry

Organismal Bioscience Degrees

- C100 Biology
- C150 Ecology & the Environment
- C300 Zoology
- C1C8 Biology with Psychology

Numbers refer to the UCAS course codes.

For each degree programme there are core courses (essential for that degree) in every year, and a choice of other courses during the second and third years. These options allow you to tailor your studying to your interests and career goals. The course content of each degree is listed on pages 6-10.

Single Honours programmes are designed to provide a thorough education in one major subject. Some are broadly based, for example Biology or Biochemistry, while others focus on a more specific aspect of the Biological Sciences, for example, Zoology or Biomedical Sciences. In combined programmes, the Biological component is 75%.

The right degree programme for you naturally depends on your interests and career aspirations – but sometimes these change. Our programmes are designed to allow students the flexibility of changing their degree, up to the start of the second year. In general the change is within Molecular Bioscience or within Organismal Bioscience. Depending on your course choice, this flexibility may even extend to the end of the second year.

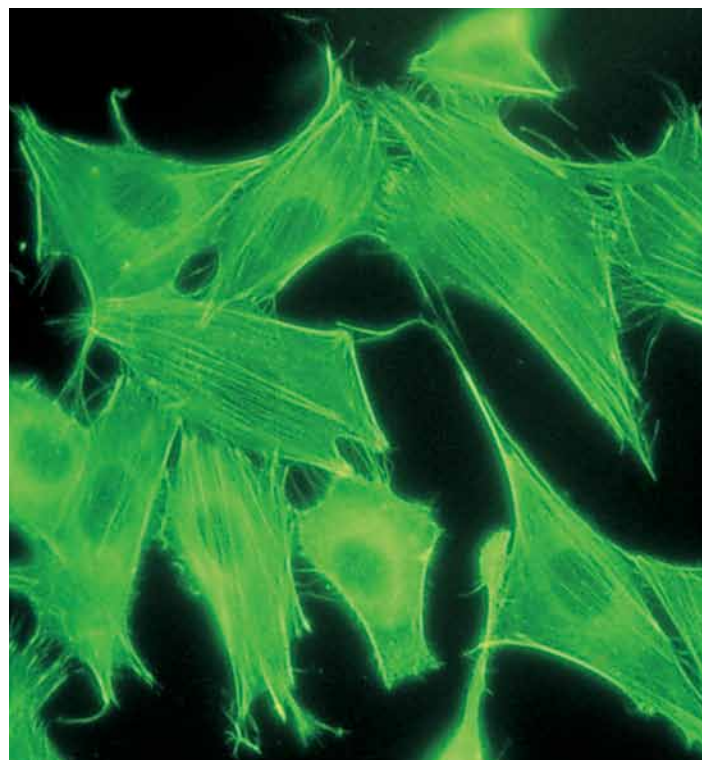
The distinctive features and major aims of our degree programmes are described below to help you select the one most suitable for you.

Molecular Bioscience Degrees

The Molecular Bioscience degree programmes are centred on the intricate molecular machinery by which cells convert energy, make complex molecules, move, divide and communicate with each other. The Biochemistry degree programme aims for a depth of understanding in the central disciplines of biochemistry, molecular biology, cell biology, and physiology. Molecular Biology emphasises the co-ordinated expression and interaction of genes and their products, and how this enables living organisms – from bacteria to man – to function, grow and reproduce. The Biomedical Sciences programme focuses on understanding the biological basis of human disease. It is a non-accredited programme and is primarily designed to equip graduates for employment in a wide range of biomedical research careers.

Organismal Bioscience Degrees

Organismal Bioscience degrees are wide-ranging and address aspects of life on earth from the cellular to the whole organism level. In the first year you study a set of common courses that cover a core of essential topics such as biodiversity, ecology and animal behaviour, cell biology, animal and plant physiology, and genetics. In the second and final years you take a combination of core and optional specialist courses, allowing you to develop your own interests and specialisms. Several course options include fieldwork trips, such as Ecology, Practical Field Ecology, Marine Biology and Marine Microbiology; the latter two are intensive 2-week courses based in Scotland.



Degree structure

B990 Biomedical Sciences

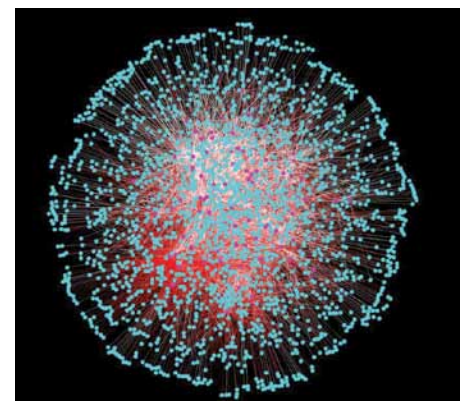
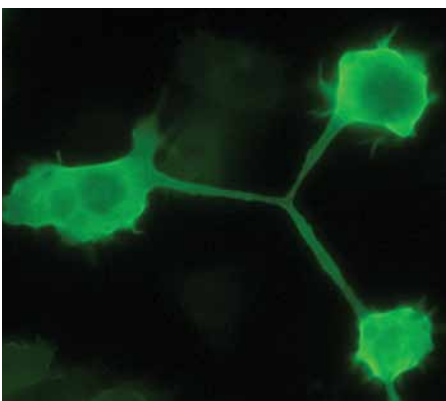
The first year provides a core background in a range of subjects including biochemistry, physiology, cell biology and molecular biology. In the second and particularly the final year you focus on specialist medical courses such as the clinical diagnosis of disease, clinical neuroscience and the molecular basis of inherited disease.

Year 1	Year 2	Year 3
CORE	CORE	CORE
Living Systems; Cell Biology and Physiology	Bioenergetics, Biosynthesis and Metabolic Regulation	Individual Research Project
Genetics and Microbiology	Essential Human Physiology in Health and Disease	Endocrinology
Biochemistry; the Molecular Basis of Life	Protein Structure and Function	Cell and Molecular Neuroscience
Chemistry for Life Scientists	Molecular Biology	Molecular Basis of Inherited Disease
	Molecular and Cellular Immunology	Clinical Diagnosis of Disease
	Hormonal and Neuronal Signalling	TWO others from list 3A (see p10)
	Pharmacology and Toxicology	
	Plus either Cell Biology or Developmental Biology	

C700 Biochemistry

This degree programme provides a comprehensive coverage of modern animal, plant and microbial biochemistry, and molecular processes. There is a high level of flexibility in the choice of courses in the second and particularly the final years.

Year 1	Year 2	Year 3
CORE	CORE	CORE
Living Systems; Cell Biology and Physiology	Bioenergetics, Biosynthesis and Metabolic Regulation	Individual Research Project
Genetics and Microbiology	Protein Structure and Function	Proteomics, Genomics and Bioinformatics
Biochemistry; the Molecular Basis of Life	Molecular Biology	FIVE others from list 3A (see p10)
Chemistry for Life Scientists	Physical Biochemistry for Life Scientists	
	FOUR others from list 2A (see p10)	



C701 Molecular Biology

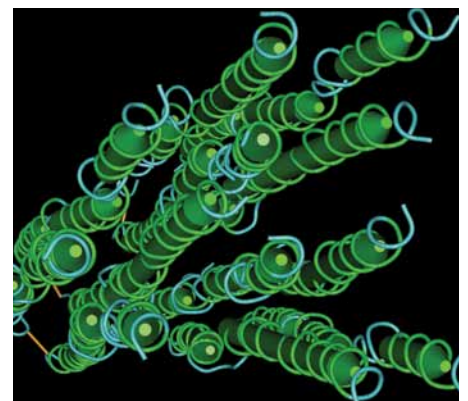
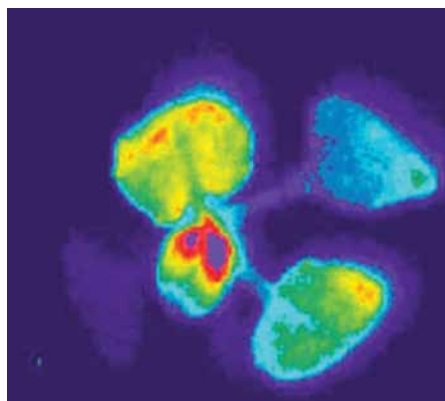
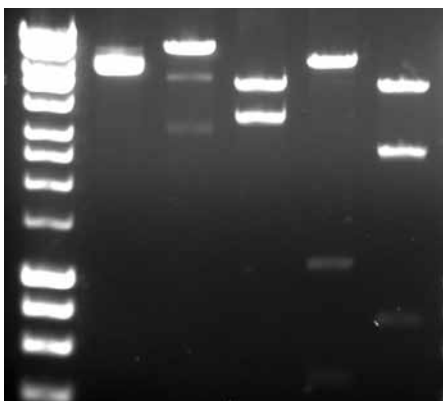
This programme provides a core background in molecular biology, cell biology, and related areas. In the second and final years you will focus on specialist courses in molecular biology and molecular genetics. These courses include extensive coverage of the powerful genetic engineering technologies which underlie many recent advances in medicine, food production and environmental monitoring, including the study of inherited human disorders, parasitic diseases and crop improvement.

Year 1	Year 2	Year 3
CORE	CORE	CORE
Living Systems; Cell Biology and Physiology	Applications of Molecular Genetics in Biology	Individual Research Project
Genetics and Microbiology	Protein Structure and Function	Proteomics, Genomics and Bioinformatics
Biochemistry; the Molecular Basis of Life	Molecular Biology	Molecular and Medical Microbiology
Chemistry for Life Scientists	Cell Biology	Advanced Molecular Biology
	FOUR others from list 2A (see p10)	Cell and Molecular Biology of Cancer
		ONE other from list 3A (see p10)

C741 Medical Biochemistry

This programme focuses on the importance of biochemistry in medicine, particularly in relation to understanding the molecular basis of disease and how this can lead to the development of novel therapeutic strategies. This includes a third year course on the clinical diagnosis of disease, which is taught entirely by experts from local hospitals.

Year 1	Year 2	Year 3
CORE	CORE	CORE
Living Systems; Cell Biology and Physiology	Bioenergetics, Biosynthesis and Metabolic Regulation	Individual Research Project
Genetics and Microbiology	Protein Structure and Function	Endocrinology
Biochemistry; the Molecular Basis of Life	Molecular Biology	Cell and Molecular Neuroscience
Chemistry for Life Scientists	Molecular and Cellular Immunology	Molecular Basis of Inherited Disease
	Hormonal and Neuronal Signalling	Clinical Diagnosis of Disease
	Physical Biochemistry for Life Scientists	
	TWO others from list 2A (see p10)	



C100 Biology

In this programme you will learn about the structure, function, evolution and diversity of living organisms and the interactions between them. The programme offers the opportunity to maintain a broad-based degree or to concentrate on areas that are predominantly ecological, physiological, and centred on either plants, animals or both.

Year 1	Year 2	Year 3
CORE	CORE	CORE
The Diversity of Life	Invertebrate Form and Function	Individual Research Project
Ecology: Animal Behaviour to Environmental Conservation	Plant Life: from Genes to Environment	Evolution
Living Systems; Cell Biology and Physiology	Biological Data Analysis and Interpretation	FIVE others from list 3B (see p10)
Genetics and Microbiology	Applications of Molecular Genetics in Biology	
	FOUR others from list 2B (see p10)	

C150 Ecology & the Environment

This degree programme is concerned with the interactions of plants, animals and their environment. In the first year you study basic biological concepts in plant and animal diversity, ecology and genetics. In subsequent years a range of courses, several of which include fieldwork, cover diverse aspects of ecology including both terrestrial and aquatic ecosystems, conservation and behavioural ecology. Relevant Geography and Geology courses may also be selected.

Year 1	Year 2	Year 3
CORE	CORE	CORE
The Diversity of Life	Invertebrate Form and Function	Individual Research Project
Ecology: Animal Behaviour to Environmental Conservation	Plant Life: from Genes to Environment	Population and Community Ecology
Living Systems; Cell Biology and Physiology	Insects, Plants and Fungi: Ecology and Applications	Evolution
Genetics and Microbiology	Practical Field Ecology	FOUR others from list 3B (see p10)
	Biological Data Analysis and Interpretation	
	THREE others from list 2B (see p10)	



C300 Zoology

This degree places particular emphasis on the study of animals. Following a common first year, a range of options is available in the second and third years which cover the diversity and evolution of animals, their adaptations to different life styles and habitats, how they function, and their behaviour. Courses may be chosen to emphasise a molecular and physiological or an ecological theme or to maintain a broad treatment of the subject.

Year 1	Year 2	Year 3
CORE	CORE	CORE
The Diversity of Life	Invertebrate Form and Function	Individual Research Project
Ecology: Animal Behaviour to Environmental Conservation	Animal Behaviour	Evolution
Living Systems; Cell Biology and Physiology	Biological Data Analysis and Interpretation	FIVE others from list 3B (see p10)
Genetics and Microbiology	Applications of Molecular Genetics in Biology	
	FOUR others from list 2B (see p10)	

C1C8 Biology with Psychology (Last Entry 2012)

This combined degree aims to provide a thorough grounding in key topics in biology and psychology that underpin the study of neuroscience, animal behaviour and human psychology. The degree programme adopts a unified approach to the study of the relationship between brain and behaviour.

Year 1	Year 2	Year 3
CORE	CORE	CORE
Ecology: Animal Behaviour to Environmental Conservation	Biological Data Analysis and Interpretation	Individual Research Project
Living Systems; Cell Biology and Physiology	Animal Behaviour	Evolution
Introduction to Abnormal Psychology	Applications of Molecular Genetics in Biology	Cell and Molecular Neuroscience
Sensation and Perception	Hormonal and Neuronal Signalling	Plus TWO Psychology courses (list on request)
Genetics and Microbiology	TWO of the following	Plus TWO others from list 3B (see p10)
	Personality and Individual Differences	
	Conceptual Issues in Psychology	
	Cognitive Psychology	
	Developmental Psychology	
	TWO others from list 2B (see p10)	



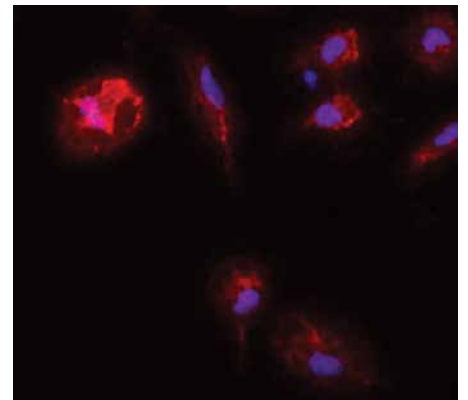
Course options

Lists of optional courses

Availability will depend on timetabling and suitable pre-requisite courses. Please note, all courses are subject to change, to reflect staff appointments.

LIST 2A	LIST 3A
Applications of Molecular Genetics in Biology	Advanced Molecular Biology
Bioenergetics, Biosynthesis and Metabolic Regulation	Biology of Parasitic Diseases
Cell Biology	Cell and Molecular Biology of Cancer
Developmental Biology	Cell and Molecular Neuroscience
Essential Human Physiology in Health and Disease	Climate Change: Plants and the Environment
Hormonal and Neuronal Signalling	Endocrinology
Molecular and Cellular Immunology	Evolution
Molecular Biology	Molecular and Medical Microbiology
Pharmacology and Toxicology	Molecular Basis of Inherited Disease
Plant Life: From Genes to Environment	Proteomics, Genomics and Bioinformatics
Protein Structure and Function	Special Study: Dissertation

LIST 2B	LIST 3B
Animal Behaviour	Advanced Molecular Biology
Applications of Molecular Genetics in Biology	Behavioural Ecology
Cell Biology	Biology of Parasitic Diseases
Developmental Biology	Cell and Molecular Biology of Cancer
Essential Human Physiology in Health and Disease	Cell and Molecular Neuroscience
Hormonal and Neuronal Signalling	Climate change: Plants & the Environment
Insects, Plants and Fungi: Ecology and Applications	Conservation Biology
Invertebrate Form and Function	Endocrinology
Marine Biology	Marine Ecology and Biodiversity
Molecular and Cellular Immunology	Marine Microbiology
Molecular Biology	Molecular and Medical Microbiology
Plant Life: From Genes to Environment	Population and Community Ecology
Practical Field Ecology	Special Study: Dissertation



Our degree programmes are based on the course unit system which creates a flexible approach to study whilst maintaining a coherent and developmental structure. Each year you take courses worth a total of four units. Each course is worth either one unit or half a unit.

Teaching occurs over two terms, each with a 'Reading Week' in the middle. The summer term is reserved for examinations and for field work teaching..

During the first year you take four one-unit courses, spread over two terms. In aggregate you will have about eight hours of lectures and ten hours of practicals per week. In addition, you are expected to undertake individual study associated with each of these course units. Continuous assessment (based on essays and reports you write during the course) makes up around one quarter to one third of your course mark; the remainder is based on written examinations taken during the summer term. Although at least three one-unit first year courses must be passed for entry into the second year, first year marks will not count in the final classification of your degree.

In the second year, courses become more specialised and class sizes smaller. Most are half-unit courses. Although there is greater variety in the ways that they are run, the aggregate time you spend in lectures and practicals is about the same as in your first year. Course marks are again typically made up of 25% continuous assessment and 75% from a summer term examination, and together they count for one third of your final degree mark.

Practical classes are a part of all first and almost all second year courses. In each class you undertake well-defined experiments that are integral to the courses. Students normally work in pairs. The practical classes are either laboratory-based or (in some organismal biology courses) consist of fieldwork with laboratory follow-up. Local facilities for fieldwork are excellent, including habitats such as chalk grasslands, heaths and rivers. Second and third year students have the option to study Marine Biology courses at the University Marine Biology Station on the Clyde.

In the third year, lecture courses are highly specialised and do not have a practical-class component. Instead, practical training is provided in an individual research project that you undertake, in an area that interests you, under the supervision of an appropriate staff member (projects are explained in more detail on page 12). Over the course of the year you will spend about 150 hours on lab or field work for your project: it is assessed on the basis of the written report and an oral presentation that you provide at the end. Marks from most lecture courses are 20% by continuous assessment and 80% by final examination. Altogether, third year marks account for two-thirds of the final mark that determines your degree classification.

In addition to the formal teaching framework described above, there is also a system of small-group tuition throughout the three years.

Personal support and small group teaching

A particular feature of our support for undergraduate students is the Personal Adviser system. Every student is assigned a member of academic staff to act as his/her Personal Adviser and Tutor. This person will see you on an individual basis to discuss academic issues, such as exam results and your choice of course options, and any other issues you wish to raise. There is no formal limit to how much you may consult him or her. In addition he or she provides small group teaching (around 7-8 students); these tutorials reinforce the lecture and practical material, provide training in a range of transferable skills, and orientate you towards good practice in examinations. And finally, your Personal Adviser can be a good source of reference letters after you graduate! However, all academics are available to answer subject-related questions – your individual contacts with them need not be restricted to your Personal Adviser.

The College-wide support services are also open to you, helping you get the most out of your time here. The Health Centre, the Student Counselling Service, the Head of Student Services, Hall Wardens – these are now called Residential Support Assistants (part of the campus wide Residential Support Team) and the Students' Union offer practical, sympathetic support for your physical and social welfare.



Research projects

The individual project work that students carry out in their third year involves participation in research programmes which are at the cutting-edge of science. Project work often forms a key talking point at job interviews, and provides excellent first-hand training for those who wish to pursue a career in the Biological Sciences.

Students benefit from our programme of research seminars, in which external speakers of international renown are frequently talking in areas closely related to project research – another example of the synergy between our teaching and research. Many students have published the work in their projects, giving them a critical leap up the career ladder.

Project work is most often based in the research laboratory of the supervisor or in our new purpose built, state-of-the-art project lab. However, other possibilities include projects that are fieldwork-based, or sited in other institutions (industrial or academic) under joint supervision, or are theoretical. When the science requires it, for example in some ecological areas, projects may be commenced in the summer preceding the third year. Our flexible approach to projects is designed to accommodate the diverse interests and needs of individual students. In the last year, for example, we have offered individual projects in the following research areas:



Biomedical & Molecular Cell Biology

- Bacterial sporulation
- Biochemistry of neural synapses
- Evolution of the mitochondrion
- Experimental models of epilepsy
- Gene therapy for muscular dystrophy
- Genetic vaccine development
- Immune signalling and control
- Pharmaceutical development
- Protozoan parasite genetics



Plant Molecular Sciences

- Adaptation of plants to cold and shade
- Control of chloroplast development
- Floral development and senescence
- How plants defend themselves
- Molecular farming in plants
- Oxidative damage and repair
- Protein kinases: the wiring system of plant cells
- Responses of algae to pollutants, pesticides and freezing



Ecology, Evolution & Behaviour

- Ancient DNA of mammals
- Animal behaviour: sexual selection and female choice
- Biological control of weeds
- Conservation of mammals
- Effects of climate change on soil biodiversity
- Forest biodiversity and insect outbreaks
- Insect ecology: why are some species pests?
- Marine and freshwater biology
- Modelling in ecology and evolution
- Molecular ecology: DNA fingerprinting in the wild
- Social insect biology

Scholarships

We offer a number of Bioscience Entrance Scholarships for students of outstanding ability. These are worth up to £1,000 and a guaranteed place in a hall of residence for all three years of your degree. After interview, application forms are automatically sent to students with reasonable chances of receiving a scholarship. The Admissions Tutor will be happy to discuss the criteria and whether it is worthwhile for you to apply. There are also a number of bursaries and scholarships offered by the College. For more information about College sources of funding visit:

www.rhul.ac.uk/studyhere/scholarships.aspx

Support for special needs

Both the School and the College are fully committed to taking account of special needs, to the extent that College resources allow. The School has two Special Needs Officers, and the College has an Educational Support Office, that meet students individually to discuss their requirements and decide how support can best be provided.

Studying abroad

Students have a range of opportunities to study for one year at a number of universities in Australia, Canada, Singapore and the USA. These exchange programmes are competitive with undergraduates from other departments in the College.

Student-Staff Committee

Two students from each year are elected to represent the student viewpoint on the Biological Sciences Student-Staff Committee. The teaching staff also provide a number of representatives. Meetings are usually chaired by a third year student and are held at least three times a year to provide feedback to staff about teaching and facilities in the School, to raise issues of concern and to make suggestions. The committee has been responsible for many enhancements to our degree programmes.

Career prospects

Research in the Biological Sciences is at the forefront of scientific discovery. Indeed, Biological Science has been called the 'ultimate 21st-century degree' and our graduates are in a perfect position to take advantage of the exciting opportunities available. Our recent graduates have gone into a wide range of careers.

Typical scientific careers for our Molecular Bioscience graduates include the pharmaceutical, healthcare, food, brewing, agriculture and associated biotechnology industries, medicine (both in research institutes and hospitals), forensic science and microbiology. Our Organismal Bioscience students have gone into careers in environmental consultancy, research (in universities and research institutes), veterinary medicine, agriculture, conservation, nature reserve management and forestry. The transferable skills learned

within our degrees have enabled many graduates to find excellent non-biological careers in organisations as diverse as advertising agencies, the civil service, merchant banks, the police, local authorities, and law firms. Recent employers also include the BBC, DEFRA, Natural England, The Environment Agency, GlaxoSmithKline, London Zoo, the Royal Botanic Gardens, the Royal Horticultural Society, Syngenta, Lush cosmetics, several Learned Societies and various charities.

Career advice

Career advice is an integral and important part of all our degree programmes. Our tutorials and careers talks provide guidance on higher degree courses, job opportunities, CV writing, job applications, and related matters essential for getting the job of your choice. Furthermore, our students benefit from professional advice from the College's Careers Service, which is part of the University of London Careers Advisory Service. Our programme has brought impressive results and, on average, 97% of our graduates gain a quality job or a place on a higher degree course within six months of graduation. This is significantly above the national average. Furthermore, a high proportion of our graduates go on to higher degree courses (such as MSc or PhD courses), reflecting the quality of our student population.



College Open Days

An Open Day at Royal Holloway offers a unique opportunity to come and see the College for yourself. You will have the chance to meet our students and teaching staff, and get a taste of what university life is really like. Parents and friends are very welcome to come with you.

Dates of Open Days can be obtained from the School or from:

www.rhul.ac.uk/studyhere/opendays

Schools Liaison Programme

We welcome enquiries and visits from small groups of sixth formers accompanied by their teachers. In addition, staff can visit schools to give lectures on many topics of interest across the spectrum of Biological Sciences. A list of topics is available on our website at www.rhul.ac.uk/studyhere/educationaladvisorsandschools/scienceoutreach.aspx. For further information about schools lectures and other outreach activities, contact our Schools Liaison Officer: Dr Alessandra Devoto; T: 01784 443184; F: 01784 414224; alessandra.devoto@rhul.ac.uk.

Science Foundation Year

For people with non-science A-levels or vocational qualifications, or mature students with qualifications inappropriate for direct entry into our degree programmes, we offer a Science Foundation Year course. Teaching takes place at a local Further Education College. All Science Foundation Year students have the option of a place in a Royal Holloway hall of residence. Successful completion of the Foundation Year guarantees you a place on the degree programme of your choice here.

Details of the Science Foundation Year can be found online at: www.rhul.ac.uk/biologicalsciences/coursefinder/sciencefoundationyear.aspx or contact the programme director: Dr Tony Stead, T: 01784 443761; F: 01784 414224; a.stead@rhul.ac.uk.





**Firdous Begum,
BSc Biomedical Sciences**

“Studying Biomedical Science at Royal Holloway University was the most rewarding experience. I found the teaching quality to be the best I had ever been given, the lecturers friendly and approachable and this helped fuel my passion for learning about human health and diseases.

The course offers a range of modules that are both highly exciting, interesting and involve a lot of practical work which allowed me to gain hands on experience.

Having spent three years at Royal Holloway I have found the college to be everything it promised to be and I am continuing my studies here by embarking on an MSc course. I would most certainly recommend studying here to prospective students”.



**Victoria Mullin,
BSc Biology**

“Importantly in this department students are names and not simply numbers, which although sounds trivial enhances the department’s community feel and most importantly your experience at university. Many of the lecturers are at the top of their field and passionate about their subjects ensuring an enjoyable and high quality learning experience. The staff will always be on hand to guide and

support students allowing them to perform to the best of their abilities.

The department develops you as both a theoretical and practical biologist. This is best demonstrated in the third year when you

undertake a compulsory independent research project as well as having the choice of writing a dissertation on a subject of your own choosing. The research project itself can be of your own design, encouraging your development as a researcher. There are also a wide variety of projects to choose from in many different research areas. In some cases they introduce you to areas of biology, which are not routinely taught giving you a flavour of other topics and a well-rounded degree. You may even get the research bug!

I certainly enjoyed my three years at Royal Holloway and feel the biological science department delivered all they promised, which is why I am staying to study for my Masters. If you choose to come to Royal Holloway the Biological Sciences department will not disappoint.”



**Zarah Pattison,
BSc Ecology and Environment**

“I had originally decided to undertake Zoological studies at Royal Holloway. However the first year’s mix of subjects and different research interests of the various lecturers led me down the exciting route of Ecology.

The broad range of courses provides greater flexibility in determining the right degree path from which you can then specialise. The biological sciences courses are both stimulating and active

with a great mix of both lab and field work, allowing you to gain valuable experience in key areas of science.

The science facilities are all modern and lecturers are always willing to go that extra mile. Small classes make for a more intimate

working environment, encouraging closer working relationships, which allow you to gain the most out each course.

The research project in the third year was instrumental in helping me choose my career path. As a young scientist, this was my chance to work alongside an expert in an area of science that most interested me.

I thoroughly enjoyed my time at Royal Holloway, so much so that I am now undertaking an MSc in Biological Research here. I will be running three experiments over the course of the year focusing on the ecology of invasive plant species, with the support of my supervisor and the expertise of the many researchers and staff at the university.

I would highly recommend the Biological Sciences course at Royal Holloway to anyone passionate about science.”

Research interests

Academic research interests in the School

The Research Assessment Exercise is probably the single most important measure of quality of a university department. We are proud of the fact that in the most recent Assessment (December 2008), we were rated as the 6th best Biological Sciences department in the country and the top in London and the South East.

Our research is divided into three main areas; Biomedical Sciences, Plant Molecular Sciences and Ecology, Evolution and Behaviour. Linking these together is a Centre for Systems Biology, a new and exciting joint venture with the Department of Computer Science.

Our research interests are diverse and continually evolving, but one of the most important facts is that you as a student can conduct a meaningful piece of research during your degree. The quality of our independent projects has been commented upon frequently by external assessors and is exemplified by the fact that a number of them have been published in leading academic journals. This is a critical first step in your career development and it is certainly true that a number of graduates have obtained excellent jobs as a result.

To find out more about the research interests of academic staff, please visit our website,

www.rhul.ac.uk/biologicalsciences/staffdirectory

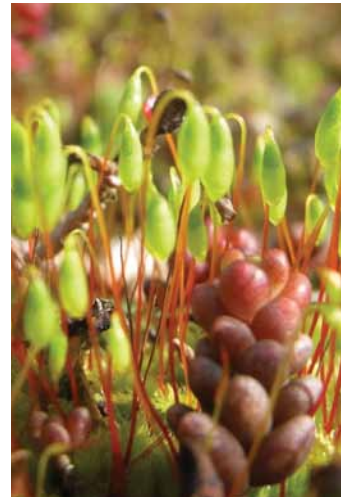
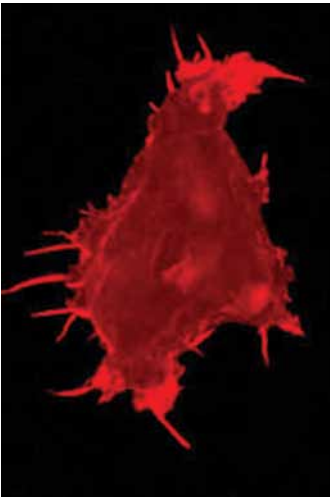
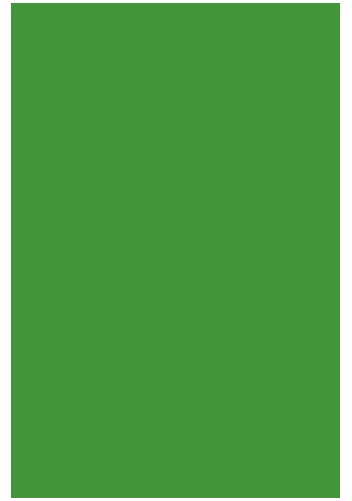


The terms and conditions on which Royal Holloway, University of London makes offers of admission to its programmes of study, including those covered in this booklet, may be found in the Undergraduate Prospectus or Postgraduate Prospectus, copies of which are available from:

www.rhul.ac.uk/studyhere

The information contained in this brochure is correct at the time of publication but is subject to change as part of the Department's policy of continuous improvement and development.





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