serieus com

UNDERGRADUATE SCIENCE COURSES

We're proud to have been behind some of the most important advances in the history of human and animal medicine, and we're committed to continuing our work for a long time to come. Our world-renowned experts will give you an unrivalled opportunity to take your knowledge to the highest level and to help shape the future of science.

93%

agreed staff made the subject interesting

93%

of students were satisfied overall

93%

agreed staff are good at explaining things

BSc Bioveterinary Sciences UNISTATS statistics (2014 data)

BSc Biological Sciences C100



In an age when human medical advances are increasingly driven by the diagnosis and treatment of disease in animals (and vice-versa), Biological Sciences is one of the most stimulating and fulfilling fields of modern study.

C100: UNDER THE MICROSCOPE

This degree course explores the basic biological sciences that inform clinical practice and research in both veterinary and human science. By focusing on the domesticated animals which form the bulk of veterinary work, it will give you a clear and detailed understanding of their physiology, cellular and molecular biology, and the mechanisms of disease.



FIRST YEAR: A NEW WAY OF THINKING

In the first year you will study the healthy animal in several core modules that cover a wide range of stimulating topics:

- The Moving Animal
- The Living Cell
- Inheritance, Reproduction and Development
- · Basic Concepts in Immunology
- Systems and Investigative Biology
- Problem Definition and Investigation.

An important part of the first year is a tutorial programme, where you will work in small groups and in one to one sessions with a tutor, to develop the academic and professional skills you need to complete the main taught parts of this degree.

SECOND YEAR: STIMULATING DISCOVERIES

The second year deals with disease and its treatment, and includes the following modules:

- The Enemy Within
- The Enemy Without
- Principles of Pharmacology.

Optional modules:

- Imaging of Disease, or
- Applied Pharmacology.

The tutorial programme continues to develop your professional and academic skills and also explores career opportunities, with emphasis on increasing your employability after graduation.

In the final term of year two, you will undertake a hypothesis driven research project in a supervised laboratory or field placement.

66 This challenging yet rewarding course offers a unique programme of research, unrivalled teaching and some of the best practical facilities in the country

THIRD YEAR: EXAMINE, EXPLORE, APPLY

You may choose from a variety of subjects, including:

- Comparative Animal Locomotion
- Advanced Skeletal Pathobiology
- · Infection & Immunity; Advanced Concepts in Reproduction
- Development & Disease
- Animal Behaviour & Welfare
- Comparative Pathology
- Advanced Concepts in Biobusiness
- Endocrine & Metabolic Syndromes
- Parasitology of Tropical Human & Veterinary Disease
- Practical Investigative Biology
- Genetics in Action
- Comparative Models of Diseases
- Prevention vs Cure.

Students may choose third year course elements from the range provided by Kings College, another constituent College of the University of London, or, by special arrangement, course elements from outside the University of London.

PROJECTS

In the final year you will also undertake a substantial research project and write a dissertation. Your research projects in the final term of the first two years of the course help you to develop your academic research and reasoning skills as well as developing sound laboratory and analytical skills alongside your theoretical knowledge. Independent project work will also be extremely valuable later on in your career, should you decide to pursue academic or industrial research, and is valued by graduate employers.





THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/ Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

English language requirements: A good working knowledge of scientific English is essential in order to follow the course, which includes a significant proportion of oral instruction and written assessments. Applicants whose first language is not English must have an acceptable English Language qualification.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65

66 The biosciences courses are heavily research-based

SUMMER VACATION PLACEMENTS

We will encourage you to apply for external funding for supervised research placements within our state of the art laboratories at the RVC. These projects typically run for between six and ten weeks according to the subject area. Recent first and second year summer vacation projects have investigated:

- Friendly fire: the eosinophil as protector or enemy
- Regulation of equine trophoblast differentiation
- The relationship between compromised blood circulation and striated muscle development
- The vitrification of bovine spermatozoa
- Influence of maternal nutrition on fat deposition in the liver of offspring.

EQUIPPING YOU FOR THE FUTURE

You'll learn practical techniques and transferable skills for careers allied to biomedical science, scientific research, conservation, animal welfare and the biotechnology and pharmaceutical industries. A biological science degree can lead to a range of different science careers in government-led laboratories, research institutes and the life science, pharmaceutical and agricultural industries.

For more information or advice on any aspect of our entry requirements, please don't hesitate to contact the Admissions Office. You can telephone us on +44 (0)20 7468 5147 or email us at: admissions@rvc.ac.uk

VISIT US

Open Days for the BSc Biological Sciences courses are held in October and February each year giving you the opportunity to discuss the course with a tutor and to meet current students.

HOW TO APPLY

Applications for admission to the BSc Biological Sciences degree course should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**

RVC INSIDER

A BioVeterinary Sciences student in his third year, Juan Sebastian Dennis-Beron is really making the most of his time with the RVC, as he explains...

Where are you based?

I am currently a third year studying at the Camden campus in London.

Describe a typical day for us...

Our typical days consist of lectures, Directed Learning (DL) and practicals; We are privileged enough to have world class academics to lecture us in their specific field, and then guide us through problem solving directed learning sessions and practicals, in which we can apply our knowledge.

What's more is that as part of second and third year, when we're not in lectures or DLs, we have the opportunity to work with these renowned scientists in their laboratories as part of our course, and partake in cutting-edge research at the forefront of science.

The best part of being a third year is I have had the opportunity to tailor my course to my own interests; I am studying modules that I myself have chosen and am really fascinated by, as well as really tailor my third year project to my particular interest and what lab work I'd like to pursue.

And do you have a good social life?

I think the intimacy of the RVC allows you to build strong friendships really quickly. The fact that our college is a specialised one, you get to be with like minded people, who you not only gel with really easily, but who have the same goals as you do – so socialising just comes naturally as part of life here. The beauty of our campus being in the heart of London also makes social life that much better, with so much at your disposal, places to go, things to do, to really enjoy your time off and really blow off some steam.

Why did you choose to study at the RVC?

The fact that the biosciences courses are heavily research-based was a big reason; I am really fascinated by understanding how and why things work and thus want to pursue that in further study. The fact that there is the ability to engage in a lot of research and the wide range of modules and topics to study was really attractive to me. With the RVC being right in the heart of my home, the city of London was a plus, too.

Has the RVC met your expectations?

I came here with an open mind and the RVC has really been a brilliant, all encompassing university. I was aware of how prestigious the place was in terms of its history, but I didn't realise how esteemed it was in the scientific world, with the calibre of scientists and research that it has. The warm and relaxing atmosphere that underpins the RVC is something that I didn't expect when I arrived, though; the friendliness and sociability is a welcome escape from the hustle and bustle all our studies.

What are the facilities like?

Our newly-refurbished lecture theatres and DL rooms really facilitate our learning, as do our laboratories. The large teaching lab, as well as our multiple computer rooms are available to us 24/7. Our library has all the books we need throughout our course, with the ability to order books from the Hawkshead Campus if necessary; we also have the ability to rent out tech such as iPads.

On the university's online facility, RVC Learn, we have access to the online library, essential course resources such recorded lectures via Echo360 and access to information you need from day to day – the RVC has a really strong tech and online presence. The campus despite being small, aside from the essentials for the course also houses other refurbished facilities such as the gym and student bar as well as the 'Lightwell' and 'Pod' areas which are great spaces for relaxation during breaks and great atmospheres to work in.

Do you feel as if you're given enough guidance and support from the College?

We're given support at all levels from the college. We gain a lot of support for our studies from lecturers constantly, but we also have a lot of schemes at our disposal such as study support on top of that. I have personally taken advantage of the careers facilities at the RVC in which staff from the University of London offer their services to us; recently, we have been offered a series of workshops of different facets of careers beyond the RVC – such as how to find and apply for further study, or careers in science.

These workshops were followed by networking events with contacts such as the Society of Biology to really guide us in our approach to really defining our careers once the course is over.

What's the best thing about studying at RVC?

Aside from the fact that you're being taught and working along-side world class scientists, it's probably that you're not just a number in comparison to larger universities. You are seen as an individual and cared for as such, with support available for whatever need.

When you graduate, do you think you'll have the skills and knowledge you need for your chosen career?

The beauty of my course and the way the RVC offers it, is that I'm given the opportunity to build all the skills necessary for a wide range of careers. The fact that it focuses heavily on research means that it opens lots of doors in terms of a career in research or academia, but you gain a lot of skills applicable in all career paths such as team work, communication, self-management – not to mention presentation skills.

BSc Bioveterinary Sciences D300



One of our most renowned courses, the BSc Bioveterinary Sciences programme is a unique blend of the sciences relating to animals, the way they work, their health, their diseases and their relationships with humans. It's a fascinating field of study, and you'll be taught by an extensive range of scientists and expert clinicians.

Please note that this degree does not qualify you to be a practising veterinary surgeon.

D300: UNDER THE MICROSCOPE

The BSc Bioveterinary Sciences programme is taught in a variety of formats including small group directed learning, laboratory placements, lectures and dissections.

As part of the programme you will learn amongst other things:

- To understand the physiology, cellular and molecular biology of a variety of animal species, in particular, the domesticated animals which form the bulk of veterinary work, and the mechanisms of disease
- The anatomical, developmental, physiological, pathophysiological and pharmacological aspects of mammalian biology in an integrated manner
- The importance of current & relevant research
- Laboratory skills and analytical skills which are developed in parallel with theoretical knowledge
- To be a lifelong learner, an essential attribute in a rapidlychanging world.

All of this is designed to produce bioveterinary scientists who play an important part in the nationwide promotion of animal and human health and welfare.

The first two years involve normal and diseased animal topics and act as the foundation for more specialised, in-depth study in the third year, which includes a substantial research project and report.

FIRST YEAR: A NEW WAY OF THINKING

- · Systems and Investigative Biology
- Essential Biomedical Sciences
- The Living Cell
- The Moving Animal
- Inheritance, Reproduction and Development
- · Basic Concepts in Immunology
- Problem Definition and Investigation
- · Supervised extended literature review

SECOND YEAR: STIMULATING DISCOVERIES

- The Enemy Within
- · The Enemy Without
- Principles of Pharmacology
- Imaging of Disease
- · Supervised laboratory or field based research project

THIRD YEAR: EXAMINE, EXPLORE, APPLY

Module options include:

- Comparative Animal Locomotion
- Advanced Skeletal Pathobiology
- Advanced concepts in reproduction
- · Development & Disease
- Animal Behaviour & Welfare
- Infection & Immunity
- Advanced Concepts in Biobusiness
- · Wild Animal Biology
- · Parasitology of Tropical Human & Veterinary Disease
- · Comparative Models of Diseases
- Endocrine & Metabolic Syndromes
- Comparative Pathology
- Practical Investigative Biology.



EQUIPPING YOU FOR THE FUTURE

Our Bioveterinary Sciences degree is ranked the No. 1 Biosciences degree in the country for graduates gaining industry relevant employment within six months by the Guardian's University Guide 2013. Many bioveterinary scientists hold prominent positions in the pharmaceutical and agricultural industries and in the medical research sector.

VISIT US

Open Days for the BSc Bioveterinary Sciences courses are held in October and February each year giving you the opportunity to discuss the course with a tutor and to meet current students.

HOW TO APPLY

Applications for admission to the BSc Bioveterinary Sciences degree course should be made through UCAS by 15 January for entry in the following year. It may be possible for late applications to be considered subject to vacancies. See **www.ucas.com**

For more information about applying to the RVC, turn to page 86.

THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/ Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65



BSc Biological Sciences or BSc Bioveterinary Sciences with a Certificate in Work-Based Learning and Research C101 and D301

A rewarding additional option for those on the BSc Biological Sciences or BSc Bioveterinary Sciences courses, the certificate allows you to spend a year working either in industry, the charity sector, a government department or research institute.

As well as learning on the job, you'll be able to develop your employability and research skills, gain an invaluable understanding of the workplace and the bio sciences sector, and form new contacts – all of which will help you secure your chosen job after you graduate. These courses are accredited by the Society of Biology.

YOUR WORK-BASED PLACEMENT

This programme is our BSc Biological Sciences or BSc Bioveterinary Sciences degree (see pages 34 and 38) with the addition of a paid placement after completion of the second year of your degree.

The placement must last a minimum of 30 weeks and you will need to complete a Placement Project during the year, which will form part of your assessment.

You are required to be proactive in searching for, applying to and securing your own placement, although support and guidance on finding a placement will be provided in specific timetabled sessions and further advice will be available during lecturers' office hours.

Most placements are salaried and students can expect to earn between £8,000 and £17,000 during the year. A placement sometimes leads to an offer of a position after graduation or future sponsorship for studying a PhD and you can certainly expect to extend your professional network.

The initial entry requirements for the course are the same as those for the three-year BSc Biological Sciences or BSc Bioveterinary Sciences (see pages 34 and 38).

HOW TO APPLY

Applications for admission to this course should be made through UCAS by 15 January for entry in the following September. It may be possible for late applications to be considered subject to vacancies. See **www.ucas.com**



🗢 MAKE THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

In order to progress into the Placement Year, students must:

- Complete Year One with a pass mark of at least 55%
- Complete and pass Year Two
- Have a written offer of a work-based placement from a placement provider
- Have a proposed placement project which addresses the Learning Outcomes.

English language requirements: A good working knowledge of scientific English is essential in order to follow the course, which includes a significant proportion of oral instruction and written assessments. Applicants whose first language is not English must have an acceptable English Language qualification.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- · Pearson Test of English overall score of at least 65

66

Develop an appreciation of the sector in which you are working and your role within it

BSc Biological Sciences (Animal Behaviour, Welfare and Ethics) D390



Animal welfare is at the heart of the RVC's mission, and building on the scientific excellence of our renowned BSc in Bioveterinary Sciences, this new pathway will be taught by staff from our Centre for Animal Welfare. You'll learn from the very best and translate good science into worthwhile practical application.



D390: UNDER THE MICROSCOPE

The Centre for Animal Welfare works closely with farmers, animal owners, policy makers, and welfare charities. It gains on-the-ground insight and is acclaimed for its valuable research endeavours. There will be opportunities to study welfare and behaviour across a range of species, including farm, companion, laboratory and zoo animals.

Half of the final year will be devoted to a major research project, to be carried out either at the RVC or with one of our partners.

Ultimately, during this programme you will adopt an interdisciplinary approach to answering fundamental questions about:

- · How animals perceive and process information about their world
- How they may adapt their behaviour to their environment and other stimuli
- The implications of this for their management and welfare.

HOW TO APPLY

Applications for admission to the BSc Biological Sciences (Animal Behaviour, Welfare and Ethics) degree course should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**

📚 MAKE THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

English language requirements: A good working knowledge of scientific English is essential in order to follow the course, which includes a significant proportion of oral instruction and written assessments. Applicants whose first language is not English must have an acceptable English Language qualification.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- · Pearson Test of English overall score of at least 65

66 A concern for animal welfare underpins our approach to research



BSc Sustainable Agriculture and Food Security 4S63

H36 - 4S63 - 3 VEARS

The Centre for Agriculture, Food and Environmental Management at the University of Hertfordshire will provide a world-class focus for education and research in food production, food supply, environmental management and sustainability.

The Sustainable Agriculture and Food Security BSc brings together the internationally recognised expertise of the University of Hertfordshire, the Royal Veterinary College, Rothamsted Research and Oaklands College.

This course, including compulsory work experience for undergraduate students, will equip graduates with knowledge and skills to lead and inform sustainable agriculture and food security – ensuring high employability of graduates.

Professor Stephen May, Deputy Principal at the Royal Veterinary College, says of this exciting new area of study: "The challenges for ensuring that we continue to have affordable and safe meat on our plates have never been greater. World demand is increasing, and at the same time UK consumers rightly demand quality-assured, welfare-friendly products. The veterinary profession will play an essential part in progress in this field, and, as the largest UK veterinary school, the RVC looks forward to making its own substantial contribution to this Centre."

This course leads to a University of Hertfordshire degree, therefore applications should be made to the University of Hertfordshire via UCAS. For further information please visit Sustainable Agriculture and Food Security BSc (Hons) on their website (**www.herts.ac.uk/ courses/sustainable-agriculture-and-food-security**).



ENGAGE. PARTICIPATE. LEARN.

Come and get a taste of life at the Royal Veterinary College. We offer two summer schools: our Widening Participation programme and our International Student Pre-Vet programme. Widening Participation students can undertake a residential course that is delivered in conjunction with partners including Aimhigher, VetNet and the Sutton Trust. Our International Student Pre-Vet programme offers veterinary experience in our globally-recognised animal hospitals and research facilities and the chance to make friends from around the world.

SUMMER SCHOOL OPPORTUNITIES



WWW.RVC.AC.UK

MSci Biological Sciences C102



This undergraduate integrated masters degree is designed to prepare you for a PhD or a career in an academic or industrial research environment. The fourth year of this course is particularly focussed on getting you 'work ready' by developing your scientific skills through extensive and challenging research opportunities.

C102: UNDER THE MICROSCOPE

To complete this programme you will study the three year BSc Biological Sciences course and then spend your fourth year carrying out an extended research project at the RVC with direction from a named supervisor(s). You will be given appropriate training by your supervisor and other work colleagues, and will have regular meetings with the supervisor. You will also be given instruction in research methodology and analytical techniques, leading to the award of a classified MSci degree.

By studying this course, you will be exposed to a wide range of challenging learning experiences that include lectures, seminars, workshops, and a variety of directed and self-directed learning activities that will include practical exercises and self-assessment tools.

Problem solving exercises, case studies, reflection and role modelling will improve your reasoning skills, while your practical skills will be developed through demonstration, observation, prosecution, feedback, and experimentation.

Other vital employability assets will be taught through group work, structured learning, practical work, presentations (oral and written) and problem-solving skills. Regular tutorials will encourage you to reflect on your learning and provide opportunities for feedback on your progress.

COURSE CONTENT

The first three years of the MSci Biological Sciences will be studied alongside BSc Biological Sciences students, with the same compulsory modules in year one; three compulsory modules and choice of one out of Applied Pharmacology or Imaging of Disease modules as well as an individual supervised research project undertaken in a wide range of different areas of study. Similarly to the BSc Biological Sciences you will be able to choose your third year modules from the full range of modules at the RVC and other London Institutions together with a twelve week research project. In the fourth year you will carry out an extended research project, as well as completing a research skills module that will include training in research methodology, analytical skills and academic writing. Formative assessment of your project will be via participation in lab meetings, journal clubs, supervisory meetings and tutorials; self-assessment and self-reflection of skills.

You will be required to submit a final Project Report and associated poster, as well as an oral examination and a Supervisor's assessment.

EQUIPPING YOU FOR THE FUTURE

This new course is perfectly suited to students that want to embark upon a career in academic or industrial research environments, such as within the biotechnology or pharmaceutical industries. It is also valuable for other biological-, biomedicine- and veterinaryrelated careers.

HOW TO APPLY

Applications for admission to the MSci courses should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**

66 An undergraduate integrated masters degree





🗢 MAKE THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/ Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65

MSci Bioveterinary Sciences D302



The MSci in Bioveterinary Sciences is a challenging and rewarding undergraduate integrated masters degree that is specially designed to prepare you for a PhD, or for a career in an academic or industrial research environment.

D302: UNDER THE MICROSCOPE

To complete this programme you will study the three year BSc Bioveterinary Sciences course and then spend your fourth year carrying out an extended veterinary science related research project at the RVC with direction from a named supervisor(s). You will be given appropriate training by your supervisor and other work colleagues, and will have regular meetings with the supervisor. You will also be given instruction in research methodology and analytical techniques, leading to the award of a classified MSci degree.

In the first year of your MSci Bioveterinary Sciences course you will learn about normal animal physiology including all major body systems and biological processes. In the second, you will explore disease processes, pathogen biology and pharmacology as well as carrying out a short veterinary research-related project.

In the third year, you'll follow a programme of advanced study chosen from a wide range of optional modules offered by the RVC. You will also carry out a longer veterinary research-related project, supervised by a member of RVC academic staff and with a wide range of topics available, during which you will continue to develop your practical, analytical and reasoning skills as well as communication, teamwork and professional development skills.

In the fourth and final year you will carry out an extended veterinary research-related project and receive specific instruction on research methodology, analytical methods and academic writing. The research projects in years 2, 3 and 4 are all relevant to veterinary science and this focus aims to make sure that you are "work ready" for a career in bioveterinary research either in an academic or industrial environment. Formative assessment of your project will be via participation in lab meetings, journal clubs, supervisory meetings and tutorials; self-assessment and self-reflection of skills.

You will be required to submit a final Project Report and associated poster, as well as an oral examination and a Supervisor's assessment.

COURSE CONTENT

You will be exposed to a wide range of learning experiences in all four years of the course that include lectures, seminars, workshops, and a variety of directed and self-directed learning activities that will include practical exercises and self-assessment tools.

Problem solving exercises, case studies, reflection and role modeling will improve your reasoning skills whilst your practical skills will be developed through demonstration, observation, prosecution, feedback, and experimentation. Other key employability skills will be taught through group work, structured learning, practical work, presentations (oral and written) and problem-solving exercises. Regular tutorials will encourage you to reflect on your learning and provide opportunities for feedback on your progress.



EQUIPPING YOU FOR THE FUTURE

This new course is perfectly suited to students that want to embark upon a career in academic or industrial research environments, such as within the biotechnology or pharmaceutical industries and veterinary science research. It is also valuable for other biological-, biomedicine- and veterinary-related careers.

HOW TO APPLY

Applications for admission to the MSci courses should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**

For more information about applying to the RVC, turn to page 86.

THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/ Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65

MSci in Applied Biological Research C103



The MSci in Applied Biological Research is an undergraduate integrated masters degree with the added benefit of a year's industrial placement, leading to a classified MSci degree. This worthwhile element will hone the knowledge gained from your first three years here and develop your scientific and transferable skills even further.

C103: UNDER THE MICROSCOPE

The first three years of the MSci Applied Biological Research will be studied alongside BSc and MSci Biological Sciences students. You will learn about normal animal physiology including all major body systems and biological processes in the first year. In the second year, you will explore disease processes, pathogen biology and pharmacology as well as carrying out a short research project.

In the third year, each student follows a programme of advanced study chosen from a wide range of optional modules offered by the RVC and/or other institutions. You will also carry out a longer research project, supervised by a member of RVC academic staff and with a wide range of topics available, during which you will continue to develop your practical, analytical and reasoning skills as well as communication, teamwork and professional development skills. During this year you will apply for a placement for your fourth year.

In the fourth year you will carry out an extended research project whilst on placement within industry and receive specific instruction on research methodology, analytical methods and academic writing. The research projects in years 2, 3 and 4, together with the additional employability skills gained on placement, aims to make sure that you are especially "work ready" for a career in biological research either in an industrial or academic environment.

COURSE CONTENT

You will be exposed to a wide range of learning experiences in all four years of the course that include lectures, seminars, workshops, and a variety of directed and self-directed learning activities that will include practical exercises and self-assessment tools. Problem solving exercises, case studies, reflection and role modelling will improve your reasoning skills whilst your practical skills will be developed through demonstration, observation, prosecution, feedback, and experimentation.



Other key employability skills will be taught through group work, structured learning, practical work, presentations (oral and written) and problem-solving exercises. Regular tutorials will encourage you to reflect on your learning and provide opportunities for feedback on your progress.

It is important to note that you will be responsible for finding and securing your fourth year placement.

EQUIPPING YOU FOR THE FUTURE

This course is designed to make you 'work ready' and able to realise your full potential as soon as you embark on your chosen career path. The path you follow could be a PhD, or a career in an industrial or academic research environment, for example within the biotechnology or pharmaceutical industries and for other biological-, biomedicine- and veterinary-related careers.

HOW TO APPLY

Applications for admission to the MSci courses should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**



🗢 MAKE THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/ Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits. **International Baccalaureate:** 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65

MSci Applied Bioveterinary Research D303



In addition to three years of valuable bioveterinary study here at the RVC, this course will enable you to embark on an extensive research programme in an industrial setting. You will be challenged by, and stimulated to challenge, current accepted wisdom in bioveterinary sciences.

D303: UNDER THE MICROSCOPE

The MSci in Applied Bioveterinary Research is an undergraduate integrated masters degree with an industrial placement, the aim of which is to prepare you for a PhD or a career in an industrial or academic research environment.

In the first year of your MSci Applied Bioveterinary Research you will learn about normal animal physiology, including all major body systems and biological processes. In the second, you will explore disease processes, pathogen biology and pharmacology as well as carrying out a short research project.

In the third year, each student follows a programme of advanced study chosen from a wide range of optional modules offered by the RVC. You will also carry out a longer research project, supervised by a member of RVC academic staff and with a wide range of topics available, during which you will continue to develop your practical, analytical and reasoning skills as well as communication, teamwork and professional development skills. During this year you will apply for a placement for your fourth year.

In the fourth, you will carry out an extended research project whilst on placement within industry and receive specific instruction on research methodology, analytical methods and academic writing. The research projects in years 2, 3 and 4 are all relevant to veterinary science and this focus, together with the additional employability skills gained on placement, aims to make sure that you are especially "work ready" for a career in bioveterinary research either in an industrial or academic environment.

COURSE CONTENT

The first two years of the course are composed of a series of compulsory taught modules which provides a comprehensive understanding of animal biological processes and body systems (year one) and an appreciation of disease processes and pathogen biology (year two). In year three you will be able to choose from a wide range of advanced modules that cover many aspects of biological and biomedical sciences.

You will carry out a large research project whilst on placement as well as completing a research skills module that will include training in research methodology, analytical skills and academic writing. Formative assessment of your project will be via participation in lab meetings, journal clubs, supervisory meetings and tutorials; self-assessment and self-reflection of skills. You will be required to submit a final Project Report and Placement Provider Report, as well as an oral examination and a Supervisor's assessment. We also require you to present a summary of your experience on placement to other students.

It is important to note that you will be responsible for finding and securing your fourth year placement.

EQUIPPING YOU FOR THE FUTURE

This course is designed to make you 'work ready' and able to realise your full potential as soon as you embark on your chosen career path. The path you follow could be a PhD, or a career in an industrial or academic research environment, for example within the biotechnology or pharmaceutical industries and for other biological-, biomedicine- and veterinary-related careers.





THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

English language requirements: A good working knowledge of scientific English is essential in order to follow the course, which includes a significant proportion of oral instruction and written assessments. Applicants whose first language is not English must have an acceptable English Language qualification.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- · Pearson Test of English overall score of at least 65

66 You will embark on an extensive research programme in an industrial setting

HOW TO APPLY

Applications for admission to the MSci courses should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**



MSci Wild Animal Biology C300



This is a wide-ranging course that will provide detailed insight into the physiology, health and welfare of wild animals. The MSci in Wild Animal Biology is an undergraduate integrated masters degree, and it will prepare you for a PhD or a career in an academic or industrial research environment within the field of zoology or wildlife welfare.

C300: UNDER THE MICROSCOPE

You will be exposed to a wide range of learning experiences in all four years of the course that include lectures, seminars, workshops, and a variety of directed and self-directed learning activities that will include practical exercises and self-assessment tools.

Problem solving exercises, case studies, reflection and role modelling will improve your reasoning skills, while your practical skills will be developed through demonstration, observation, prosecution, feedback, and experimentation. Other key employability skills will be taught through group work, structured learning, practical work, presentations (oral and written) and problem-solving exercises. Regular tutorials will encourage you to reflect on your learning and provide opportunities for feedback on your progress.

In the first year of your MSci Wild Animal Biology, you will learn about normal animal physiology including all major body systems and biological processes. In the second, you will explore disease processes, pathogen biology and pharmacology as well as carrying out a short research project.

In the third year, each student follows a programme of advanced study chosen from a wide range of optional modules offered by the RVC. You will also carry out a longer research project, supervised by a member of RVC academic staff and with a wide range of topics available, during which you will continue to develop your practical, analytical and reasoning skills as well as communication, teamwork and professional development skills.

In the fourth you will gain practical exposure to wild animal species and an understanding of their health and welfare as well as providing training in research methodologies relevant to the study of wildlife. The research projects in years 2, 3 and 4 are all relevant to veterinary science and this focus aims to make sure that you are "work ready" for a career in biological and/or wild animal biology research either in an academic or industrial environment.

COURSE CONTENT

The first two years of the course are composed of a series of compulsory taught modules which provides a comprehensive understanding of animal biological processes and body systems (year one) and an appreciation of disease processes and pathogen biology (year two). In year three you will be able to choose from a wide range of advanced modules that cover many aspects of biological and biomedical sciences. You will complete a research project in year four, also being able to choose from a wide variety of topics and subject areas.

EQUIPPING YOU FOR THE FUTURE

By studying this course, you will be challenged by, and stimulated to challenge, current accepted wisdom in biological sciences and wild animal biology. It will prepare you for either further study in the form of a PhD or a career in an academic or industrial research environment.

HOW TO APPLY

Applications for admission to the MSci courses should be made through UCAS by 15 January for entry in the following year. See **www.ucas.com**



THE GRADE

Please check the website for the most up to date entry qualifications. Those listed below are guidelines. If you are not sure about your qualifications or you are an international student, please contact us.

A-Level (AL): ABB-BBB including Chemistry or Biology/ Human Biology and excluding General Studies.

AS Level grades/subjects required: None.

GCSE: At least 5 C grades including minimum grade B Double Award Science (or 2 individual science subjects), English and Maths.

BTEC (City & Guilds): DDM in National/Level 3 Extended Diploma in Applied Science or Animal Management with specified units required (Distinctions required in some of these units).

Access to HE Diploma: Science based diploma required with a minimum of 15 Level 3 credits in Chemistry at Distinction or 15 level 3 credits in Biology at Distinction. Merits required in all other level 3 credits.

International Baccalaureate: 655-555 at Higher Level including Chemistry or Biology.

Scottish Qualifications: Advanced Higher grades AB-BB including Chemistry or Biology plus 5 Highers at grade B.

Welsh Baccalaureate Advanced Diploma: ALs at grades AB-BB required including Chemistry or Biology and excluding General Studies.

The Irish Leaving Certificate: ABBBBB-BBBBBB at Higher Level including Chemistry or Biology. English Language, Maths and Physics minimum grade B at Ordinary Level if not taken at Higher level.

- IELTS score of 7.0 or above with minimum 6.5 in each component
- Pearson Test of English overall score of at least 65