

BSc Biological Sciences (Animal Behaviour, Welfare and Ethics) Programme
Specification
Applies to cohort commencing 2015

1. Awarding institution	The Royal Veterinary College
2. Teaching institution	The Royal Veterinary College
3. Programme accredited by	N/A
4. Final award	Bachelor of Science
5. Programme Title	Biological Sciences (Animal Behaviour, Welfare and Ethics)
6. Date of First Intake	2015
7. Frequency of Intake	Annually in September
8. Duration and Mode(s) of Study	Three years full-time
9. Timing of Examination Board meetings	Annually in July
10. Date of Last Periodic Review	N/A
11. Date of Next Periodic Review	2019/20
12. Entry Requirements	Three Advanced Level/A2 subjects including Chemistry or Biology/Human Biology. General studies is not accepted as a third subject. Where an applicant is taking Biology/Human Biology/Chemistry AND another science subject (Human Biology, Biology, Chemistry, Physics or Mathematics), they will receive an offer of BBB. Where an applicant is taking Human Biology/Biology/Chemistry and two other non-science subjects, they will receive an offer of ABB including an A in the science subject they are taking. Other courses that will be accepted include; 15-19 Diploma, Access to HE Diploma. BTEC National Diploma in Animal Management. BTEC or City & Guilds Level 3 Extended Diploma in Animal Management. BTEC National Diploma/Level 3 Extended Diploma in Applied Science. BTEC Subsidiary Diploma in Applied Chemistry. Cambridge Pre-U. Birkbeck College's Certificate of Higher Education in <i>"Life Sciences for subjects allied to medicine"</i>. International Baccalaureate Certificate/Diploma. Scottish Qualifications. Welsh Baccalaureate. Irish Leaving Certificate. UCL University Preparatory certificate for Science & Engineering (UPCSE) for International Students. Advanced Placements. Canadian High School Certificate. <u>and</u> GCSEs at grade B or above in English, Mathematics (if not studied at A-Level) and

	Double Science (or in two individual science subjects, if taken separately)
13. UCAS code	D390
14. JACS Code	C000: Biological Sciences
15. Relevant QAA subject benchmark group(s)	Biosciences
16. Reference points	
Regulations of the University of London	
The Framework for Higher Education Qualifications in England, Wales and Northern Ireland, Quality Assurance Agency, 2008	
SEEC Level Descriptors for Higher Education, SEEC, 2010	
17. Educational aims of programme	
- To offer a high quality course incorporating extensive research experience, in which students are challenged by, and stimulated to challenge, accepted wisdom in all fields of biological science; - To prepare graduates for a PhD or careers in academic and commercial research, and in a range of graduate careers that involve the management and welfare of companion, farm, laboratory, working and wild animals.	
18. Programme outcomes - the programme offers opportunities for students to achieve and demonstrate the following learning outcomes.	
At the time of graduation students should, to a standard appropriate for a new Bachelor of Science graduate, be able to: A. Demonstrate knowledge and understanding of: - Specialised terminology which underpins the disciplines of animal behaviour and welfare. - Related, underpinning sciences. - The political, social, legal and economic context of Animal Welfare. B. Display the following cognitive (thinking) skills: The ability to: - Access information and skills as required by a task - Make methodical observations on the normal and abnormal functioning of biological systems - Discriminate between important and relatively unimportant information and observations - Reflect on information and observations, and solve problems - Discuss uncertainty in relation to scientific "facts", and balance different schools of thought. C. Display the following practical skills including the ability to: - Design and execute experiments, and to analyse and interpret the resultant data. - Present scientific evidence and conclusions in a variety of formats. - Scientifically measure basic animal behaviour and welfare.	

D. The following are considered to be Key skills:

1. Communication.
2. Teamwork.
3. Personal management and career development.
4. Effective learning.
5. Problem-solving.
6. Information technology.
7. Numeracy.
8. Acting with integrity, being honest, fair and compassionate in all their work.
9. Maintaining high ethical principles in relation to business dealings, the use of information and experimentation in humans and animals.

E. Demonstrate the following advanced skills:

1. Clearly communicate their project aims, background, results, relevance and own proposals for future research, demonstrating critical analysis and a deep and systematic knowledge and understanding of the literature
2. Clearly and properly record their research
3. Demonstrate excellent professional conduct
4. Identify specific areas for personal and skill development
5. Critical evaluation of evidence

Teaching/learning methods

Students develop their knowledge and understanding through attendance at lectures, seminars, workshops, tutorials and through a variety of directed and self-directed learning activities, including practical exercises and self-assessment tools. They will learn cognitive skills through problem solving, case studies, reflection, debate and role modelling. Practical skills will be learned through demonstration, observation, prosecution, feedback, role modelling and experimentation, and participation in field trips. Key Skills will be taught through group work and exercises, structured learning, practical work, reflection, presentations (oral and written) and problem-solving exercises.

Assessment

A. Knowledge and understanding:

Students will be assessed through a combination of formative, in-course and summative examinations, using a range of question formats.

B. Cognitive (thinking) skills:

Cognitive skills will be assessed through appropriately structured written examinations, together with project reports, in course essays and discussion of oral and poster presentations.

C. Practical skills:

Practical skills will be assessed using structured tasks and experimental projects.

D. Key Skills:

Through key skills assessment criteria, alongside systems and discipline-based assessment criteria, these skills will be assessed in a variety of ways throughout the course.

E. Research Skills:

Research skills are assessed in all years through written and oral presentation of a literature-based project and two experimental projects, with supervisor assessments for experimental projects.

19. Programme structures and requirements, levels, modules, credits and awards

The Biological Sciences (Animal Behaviour, Welfare and Ethics) degree is a linear, non-modular programme in all three years.

Year One is valued at 120 credits at Level 4; Year Two, 120 credits at Level 5; Year Three, 120

credits at Level 6; Year Four, 120 credits at Level 7.	
Year 1 The core course will comprise: • Essential Biomedical Sciences- The Moving Animal, The Living Cell, Inheritance; Reproduction & Development, Basic Concept in Immunology • Systems & Investigative Biology, Problem Definition and Investigation (with ABWE-related literature-based project)	Year 2 The core course will comprise: • The Enemy Within • The Enemy Without • Principles of Pharmacology • Introduction to Animal Behaviour and Welfare • ABWE-related research project
Year 3 Science of Animal Welfare (15 credits) Animal Behaviour and Cognition (15 credits) Animals and Human Society (15 credits) Applied Animal Welfare (15 credits) Hypothesis driven ABWE-related research project involving data analysis and interpretation (60 credits)	
The generic theme will continue throughout the three years and will comprise: • finding and using information • what makes a professional scientist? • epistemology • scientific method • statistics • data recording • basic epidemiology • experimental design • risk • analytical tools • ethics • communication skills • leadership • team building and function • business and financial management • patent law • evidence-based decision-making	
20. Work Placement Requirements	Optional Certificate in Work-based Learning and Research placement year