

PROGRAMME SPECIFICATION

1. Applies to cohort commencing in:	2021		
2. Degree Granting Body	University of London		
3. Awarding institution	The Royal Veterinary College		
4. Teaching institution	The Royal Veterinary College		
5. Programme accredited by	Royal Society of Biology		
6. Name and title	Bachelor of Science (BSc Bio Sci) / Master in Science in Biological Sciences (MSci Bio Sci)		
7. Intermediate and Subsidiary Award(s)	Cert HE, Dip HE		
8. Course Management Team	Course Director: Dr Charlotte Lawson; Year 1 Leader: Dr Donald Palmer; Year 2 Leader: Dr Abir Mukherjee; Year 3 Leader: Dr Isabel Orriss Year 4 Leader: Dr Claire Thornton		
9. FHEQ Level of Final Award	BSc Level 6 MSci Level 7 See: http://www.qaa.ac.uk/en/Publications/Documents/qualificat ions-frameworks.pdf		
10. Date of First Intake	2002 for BSc, 2014 for transfer from BSc Biological Sciences to MSci year 4 2015 for MSci Biological Sciences		
11. Frequency of Intake	Annually in September		
12. Duration and Mode(s) of Study	Full time: BSc – three years MSci – four years Face to face. However, during the Coronavirus/COVID-19 pandemic, the mode of delivery will be blended, which will include aspects of onsite (face-to-face) and digital delivery. The proportions of onsite and digital delivery will vary according to Covid restrictions, such as social distancing requirements, in place at the time of delivery.		
13. Registration Period (must be in line	Full Time Part Time		
with the General Regulations for Study and Award)	MinimumMaximumMinimumMaximumBSc2546 AcademicAcademicAcademicAcademicyearsyearsyearsyearsyearsyears7 Academic		
	Academic Academic Academic years years years		
14. Timing of Examination Board meetings	Annually in July		
15. Date of Last Periodic Review	2020		
16. Date of Next Periodic Review	2023		
17. Language of study and assessment	English		
18. Entry Requirements	https://www.rvc.ac.uk/study/undergraduate/bsc-biological- science#tab-entry-requirements		

	Progression to Year 4 To be considered for progression to Year 4, applicants must have achieved an aggregate Year 2 mark of at least 50%
19. UCAS code	N/A
20. HECoS Code	100345
21. Relevant QAA subject benchmark	Biosciences
22. Other External Reference Points	

Report of the Committee of Enquiry into Veterinary Research (the Selborne Report)

Quality Assurance Agency, The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies, 2014

Regulations of the University of London Future Fit, CBI 2009 Degree Accreditation Criteria, Royal Society of Biology 2019 SEEC Level Descriptors for Higher Education, SEEC, 2010

23. Aims of programme

BSc Biological Sciences

- To offer a high quality course, in which students are challenged by, and stimulated to challenge, accepted wisdom in all fields of biological and biomedical science.
- To prepare graduates for careers in academic and industrial research, biotechnology and the pharmaceutical industry in general, and in other health and medicine-related industries.
- To offer a high quality preparation for students aspiring to graduate entry to Medicine, Dentistry or Veterinary Medicine.

MSci Biological Sciences

The specific aims of the MSci Year are to enable students to:

- Gain research experience within biological and biomedical sciences that is relevant to their degree.
- Gain a deep and systematic understanding of current questions, problems and methods employed within the selected specialised research topic.
- Implement principles of project and experimental design and carefully execute, record and clearly disseminate research.
- Use self-reflection to improve levels of knowledge, professionalism, personal skills and research skills.
- Develop a sound appreciation of the research environment in which the student is working and their role within it.

24. Overall Programme Level Learning Outcomes - the programme offers opportunities for students to achieve and demonstrate the following learning outcomes. Learning outcomes should be specified for all intermediate awards as well as for the terminal award.

On successful completion of the bachelor of science course, students will:	Modules in which each learning outcome will be developed and assessed:	
Have a detailed understanding of cell biology, physiology, and genetics.	Year 1 modules	
Have a detailed understanding of the basis of infectious & non-communicable diseases and an appreciation of pharmacology and the broader applications for disease control.	Year 2 modules	

Display practical skills including the ability to design and execute experiments, and present conclusions in a variety of formats. Year 3 Research Project Year 4 Research Project Year 4 Project		
appropriate information, make methodical observations on the normal and abnormal functioning of biological systems, discriminate between important and relatively unimportant information and observations, and bole problems, and discuss uncertainty in relation to scientific "facts", and balance different schools of thought. Develop independent and lifelong learning skills to promote their own personal and professional development Develop important employability skills including: communication, teamwork, personal management and career planning, effective learning, problem, solving, digital literacy, and numeracy. Act with integrity, be honest, fair and compassionate to allow ork, including communication in humans and animals. Have an appreciation of health and safety appropriate to laboratory and field work, including communicate their project and safety appropriate to laboratory and field work, including communicate their project and safety appropriate to laboratory and field work, including communicate their project and safety appropriate in science course, students will additionally be able to: Clearly communicate their project aims, background, results, relevance and own proposals for future research, demonstrate excellent professional cealing of the literature. Clearly and properly record their research, demonstrate excellent professional cealing of the literature. Clearly and properly record their research, demonstrate excellent professional cealing of the literature. Clearly and properly record their research, demonstrate excellent professional cealing of the literature. Clearly and properly record their research. Demonstrate excellent professional cealing and a didecp and systematic knowledge and understanding of the literature. Year 4 project	to design and execute experiments, analyse and interpret the resultant data, and present conclusions in a variety of formats.	-
learning skills to promote their own personal and professional development • Develop important employability skills including: communication, tearnwork, personal management and career planning, effective learning, problem-solving, digital literacy, and numeracy. Across all modules, with particular emphasis in projects and tutorials • Act with integrity, be honest, fair and compassionate in all their work. Investigative Projects (all years) • Maintain high ethical principles in relation to professional dealings, the use of information and experimentation in humans and animals. Investigative Projects (all years) • Have an appreciation of health and safety appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH documents. Investigative Projects (all years) • Clearly communicate their project aims, background, results, relevance and own proposals for future research, demonstrating of the literature. Research Skills module & Year 4 project • Clearly and properly record their research. Year 4 project • Demonstrate excellent professional conduct. Year 4 project • Identify specific areas for personal and skill development. Research Skills module	appropriate information, 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, and discuss uncertainty in relation to scientific "facts", and balance different schools of	Year 3 Research Project
including: communication, teamwork, personal management and career planning, effective learning, problem-solving, digital literacy, and numeracy. and tutorials • Act with integrity, be honest, fair and compassionate in all their work. Investigative Projects (all years) • Maintain high ethical principles in relation to professional dealings, the use of information and experimentation in humans and animals. Investigative Projects (all years) • Have an appreciation of health and safety appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH documents, Investigative Projects (all years) • 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. Research Skills module & Year 4 project • Clearly and properly record their research. Year 4 project • Clearly and properly record their research. Research Skills module & Year 4 project • Clearly and properly record their research. Research Skills module & Year 4 project • Identify specific areas for personal and skill development. Year 4 project	learning skills to promote their own	Tutorials & Skills Workshops (across all modules)
compassionate in all their work. Maintain high ethical principles in relation to professional dealings, the use of information and experimentation in humans and animals. Have an appreciation of health and safety appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH documents, On completion of the master in science course, students will additionally be able to: Clearly communicate their project aims, background, results, relevance and own proposals for future research, deen and systematic knowledge and understanding of the literature. Clearly and properly record their research. Clearly and properly record their research. Demonstrate excellent professional conduct. Demonstrate excellent professional conduct. Identify specific areas for personal and skill development. Zs. Teaching/learning methods	including: communication, teamwork, personal management and career planning, effective learning, problem-	
appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH documents, Image: Completion of the master in science course, students will additionally be able to: On completion of the master in science course, students will additionally be able to: Image: Completion of the master in science course, students will additionally be able to: • 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. Research Skills module • Clearly and properly record their research. Research Skills module & Year 4 project • Demonstrate excellent professional conduct. Year 4 project • Identify specific areas for personal and skill development. Research Skills module 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic	 compassionate in all their work. Maintain high ethical principles in relation to professional dealings, the use of information and experimentation in 	Investigative Projects (all years)
course, students will additionally be able to: Research Skills module • 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. Research Skills module • Clearly and properly record their research. Research Skills module & Year 4 project • Clearly and properly record their research. Research Skills module & Year 4 project • Demonstrate excellent professional conduct. Year 4 project • Identify specific areas for personal and skill development. Research Skills module 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic	appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH	Investigative Projects (all years)
background, results, relevance and own proposals for future research, demonstrating critical analysis and a deep and systematic knowledge and understanding of the literature. Clearly and properly record their research. Clearly and properly record their research. Demonstrate excellent professional conduct. Identify specific areas for personal and skill development. Year 4 project 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic Provisional conduct. Performance total number of hours These figures may differ during the COVID-19 pandemic		
research. Year 4 project • Demonstrate excellent professional conduct. Year 4 project • Identify specific areas for personal and skill development. Research Skills module 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic	background, results, relevance and own proposals for future research, demonstrating critical analysis and a deep and systematic knowledge and	Research Skills module
conduct. Identify specific areas for personal and skill development. 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic		Research Skills module & Year 4 project
skill development. 25. Teaching/learning methods Approximate total number of hours These figures may differ during the COVID-19 pandemic		Year 4 project
These figures may differ during the COVID-19 pandemic		Research Skills module
	25. Teaching/learning methods	
	Lectures	8- 10 hours per week

Practical / Directed Learning sessions	8-10 hours per week
Tutorials & self-directed Learning	5 hours per week
Research Project (Year 4)	20 hours per week
26. Assessment methods	Percentage of total assessment load
Coursework	BSc: 22% MSci: 20%
Written Exams	BSc: 45% MSci: 33%
Projects	BSc: 33% MSci: 47%

27. Feedback

In each module in each year, there are a number of formative feedback opportunities. These include written formative feedback on individual coursework, online quizzes with answers, group question and answer sessions, feedback to the year group about exam and ICA performance, feedback to individual students about exam and ICA performance (in one-to-one tutorials). Students are encouraged to seek feedback from lecturers and tutors as needed during all small group learning and practical classes. Frequent opportunities for formative feedback (oral and written) during investigative projects.

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

NB: The College will not deliver any module or part of a programme if circumstances have changed to threaten its quality or viability. Such offerings could change after a student has started the course. However, the College will always offer alternatives that will be of equal cost in both fees and add-on expenses to the student and of equal academic value.

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	Module Title	FHEQ Level	Credits	Compulsory or optional	
Year 1, Term 1	Biology of the Cell	4	15	Compulsory	
Year 1, Term 1	Inheritance, Genes and Evolution	4	15	Compulsory	
Year 1, Term 1	Developmental Biology	4	15	Compulsory	
Year 1, Term 2	The Moving Animal	4	15	Compulsory	
Year 1, Term 2	Integrated Physiology 1	4	15	Compulsory	
Year 1, Term 2	Integrated Physiology 2	4	15	Compulsory	
Year 1, Term 3	Problem Definition and Investigation	4	15	Compulsory	
Year 1, Term 3	Project	4	15	Compulsory	
Year 2, Term 1	Basis of Disease	5	15	Compulsory	
Year 2, Term 1	Ageing and Degeneration	5	15	Compulsory	
Year 2, Term 1	Principles of Infectious Diseases	5	15	Compulsory	
Year 2, Term 2	Control of Infectious Diseases	5	15	Compulsory	
Year 2, Term 2	Principles of Pharmacology	5	15	Compulsory	
Year 2, Term 2	Applied Pharmacology	5	15	Optional	
Year 2, Term 2	Imaging of Disease	5	15	Optional	

Year 2, Term 2	Introduction to Animal Behaviour, Welfare & Ethics	5	15	Optional
Year 2, Term 2	Introduction to One Health	5	15	Optional
Year 2, Term 3	Biological Sciences Project	5	30	Compulsory
Year 3	Biological Sciences Project	6	30 or 60	Compulsory
Year 3	Biological Sciences Dissertation	6	30	Optional (only if taken alongside 30 credit research project)
Year 3, pre-Term 1	Practical Investigative Biology	6	15	Optional
Year 3, Term 1	Comparative Animal Locomotion	6	30	Optional
Year 3, Term 1	Advanced Concepts in Reproduction	6	15	Optional
Year 3, Term 1	Development & Disease	6	15	Optional
Year 3, Term 1	Animal Behaviour & Cognition	6	15	Optional
Year 3, Term 1	Applied Molecular Microbiology	6	15	Optional
Year 3, Term 1	Parasitology of Human & Veterinary Tropical Diseases	6	15	Optional
Year 3, Term 1	Endocrine & Metabolic Syndromes	6	15	Optional
Year 3, Term 1	Advanced Skeletal Pathobiology	6	15	Optional
Year 3, Term 1	Science of Animal Welfare	6	15	Optional
Year 3, Term 1	Omic Approaches to Biology	6	15	Optional
Year 3, Term 1	Principles of Pathology	6	30	Optional
Year 3, Term 1	Applications of Pathology	6	30	Optional
Year 3, Term 2	Advanced Concepts in Biobusiness	6	15	Optional
Year 3, Term 2	Infection & Immunity	6	30	Optional
Year 3, Term 2	Comparative Models of Disease	6	15	Optional
Year 3, Term 2	Epidemiology: the Bigger Picture	6	15	Optional
Year 3, Term 2	Applied Animal Welfare	6	15	Optional
Year 3, Term 2	Animals & Human Society	6	15	Optional
Year 3, Term 2	Comparative Anatomy	6	15	Optional
Year 3, Terms 1 & 2	Various KCL modules	6	15 or 30	Optional
Year 4, Term 1 (MSci only)	Research Skills	7	15	Compulsory
Year 4 (MSci only)	Biological Sciences Research Project	7	105	Compulsory

29. Work Placement Requirements or Opportunities	Optional Certificate in Work-based Learning and Research placement year	
30. Student Support	http://www.rvc.ac.uk/study/support-for- students	

31. Assessment

Assessment and Award Regulations: https://www.rvc.ac.uk/about/the-rvc/academic-quality-regulations-procedures

Version Number	Amended by	Date
1	Academic Quality Manager	17.06.20
2	Course Director	12.08.20
3	Sciences Course Support Manager	13.8.20
4	Sciences Course Support Manager	30.06.21
5	Academic Quality Manager	10.08.21