Royal Veterinary College
University of London

PROGRAMME SPECIFICATION

1. Applies to cohort commencing in:	2023
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 / Master in Science in Biological Sciences (BSc Bio Sci) / (MSci Bio Sci) Bachelor of Science / Master in Science in Biological Sciences with Placement Year (BSc Bio Sci PY) / (MSci Bio Sci PY)
7. Intermediate and Subsidiary Award(s)	Cert HE in Biological Sciences, Dip HE in Biological Sciences
8. Course Management Team	Course Director: Dr Charlotte Lawson Year 1 Leader: Dr Donald Palmer Year 2 Leader: Dr Abir Mukherjee Placement Year Leader (if applicable): Dr Claire Russell Year 3 Leader: Dr Isabel Orriss Year 4 Leader: Dr Claire Thornton
9. Level of Final Award	BSc Level 6 MSci Level 7 See: Office for Students (OfS) Sector-recognised standards
10. Date of First Intake	September 2002 for BSc, September 2014 for transfer from BSc Biological Sciences to MSci year 4 September 2015 for MSci Biological Sciences September 2022 with Placement Year
11. Frequency of Intake	Annually in September
12. Duration and Mode(s) of Study	BSc – three years, full time. BSc with Placement Year– four years, full time. MSci – four years, full time. MSci with Placement Year– five years, full time. A mix of teaching approaches including onsite and digital, synchronous and asynchronous, class and self-paced, expert-led, group and individual.
13. Registration Period *(must be in line with the General Regulations for Study and Award)*	

Award	Full Time	
	Minimum	Maximum
BSc	2 Academic years 3 Academic Years with Placement Year	5 Academic years 6 Academic Years with Placement Year
MSci	3 Academic years 4 Academic Years with Placement Year	6 Academic years 7 Academic Years with Placement Year

14. Timing of Examination Board meetings	Annually in July and September
15. Date of Last Periodic Review	2020 n/a for Placement Year
16. Date of Next Periodic Review	2024
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 the Placement Year Written offer of a Placement from a placement provider. The proposed placement project must address the Learning Outcomes. The placement provider must satisfactorily complete an 'RVC Collaborative Partners' form. The student must attend a Placement Health and Safety Induction at the RVC. Travel Risk Assessments must be performed if the placement is abroad. A Placement Supervisor must be named, and their details provided. Progression to MSci 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	BSc: C100 BSc with Placement Year: C101 MSci: C102 MSci with Placement Year: C104
20. HECoS Code	100345
21. Relevant QAA subject benchmark	Biosciences
22. Other External Reference Points	
Regulations of the University of London Office for Students (OfS) Sector-recognised standards Quality Assurance Agency, The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies, 2014 Credit Level Descriptors for Higher Education, SEEC Royal Society of Biology Degree Accreditation Criteria	
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.

Placement Year

- To prepare students for the workplace through development of employability skills and understanding of the sector and organisation in which they are placed
- To increase student employability by providing work and research experience with a placement provider
- To provide students with a framework for lifelong learning
- To provide opportunity to develop research skills, including synthesis of information, critical analysis and an appreciation of factors that contribute to uncertainties

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, analyse and interpret the resultant data, and present conclusions in a variety of formats.	Year 2 Project

• Have developed the ability to access 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 thought.	Projects
• Develop independent and lifelong learning skills to promote their own personal and professional development	Tutorials & Skills Workshops (across all modules)
• Develop important employability skills including: communication, teamwork, 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. • Maintain high ethical principles in relation to professional dealings, the use of information and experimentation in humans and animals.	Projects
• Have an appreciation of health and safety appropriate to laboratory and field work, including completion and understanding of risk assessment and COSHH documents.	Projects
On completion of the placement year, students will additionally be able to:	
• Employ models of reflection to explore and critically evaluate how these influence own learning, personal and professional planning; providing recommendations and action plan to improve	Professionalism and Project modules
• Demonstrate experience within the biological sciences that is relevant to their degree	Professionalism and Project modules
• Demonstrate an appreciation of the sector in which the student is working, a broad knowledge of the field, and their role within it	Professionalism and Project modules
• Devise, interrogate and sustain arguments using scholarly sources and the accurate deployment of established techniques of analysis and enquiry within one topic.	Professionalism and Project modules
• Demonstrate an appreciation of uncertainties and limits of knowledge	Professionalism and Project modules

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, 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 Project
• Demonstrate excellent professional conduct.	Project
• Identify specific areas for personal and skill development.	Research Skills module
25. Teaching/learning methods	**Approximate total number of hours per week over X many weeks?**
Lectures	8 - 10 hours per week
Practical / Directed Learning sessions	8 -10 hours per week
Tutorials & self-directed Learning	5 hours per week
Placement Year	35 hours per week
Research Project (MSci)	20 hours per week
26. Assessment methods	**Percentage of total assessment load**
Coursework	BSc: 22% BSc with Placement Year: 20% MSci: 20% MSci with Placement Year: 20%
Written Exams	BSc: 45% BSc with Placement Year: 40% MSci: 33% MSci with Placement Year: 30%
Projects	BSc: 33% BSc with Placement Year: 40% MSci: 47% MSci with Placement Year: 50%
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 projects.	
28. Work Placement Requirements or Opportunities	Yes, if doing the Placement Year at Level 6
29. Student Support	http://www.rvc.ac.uk/study/support-for-

	students and https://www.kcl.ac.uk/campuslife/services/student-services

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

31. Programme structures and requirements, levels, modules, credits and awards
NB: Students planning more than a Stage ahead should be aware that 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.

Stage 1 (Year One) Credit and Awards	**Details**
Total Credit to be studied at this stage	120 at Level 4
There are no optional modules at this stage	
Award available for completion of the Stage	Certificate in Higher Education Biological Sciences

Stage 1 (Year One) Compulsory Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
1	1	RVC		Biology of the Cell	4	15	Compulsory	None
1	1	RVC		Inheritance, Genes and Evolution	4	15	Compulsory	None
1	1	RVC		Developmental Biology	4	15	Compulsory	None
1	2	RVC		The Moving Animal	4	15	Compulsory	None
1	2	RVC		Integrated Physiology 1	4	15	Compulsory	None
1	2	RVC		Integrated Physiology 2	4	15	Compulsory	None
1	3	RVC		Problem Definition and Investigation	4	15	Compulsory	None
1	3	RVC		Project	4	15	Compulsory	None

Stage 2 (Year Two) Credit and Awards	**Details**
Total Credit to be studied at this stage	120 at Level 5

Optional modules required in addition to compulsory modules	15 credits
Award available for completion of the Stage	Diploma in Higher Education Biological Sciences

Stage 2 Compulsory Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
2	1	RVC		Basis of Disease	5	15	Compulsory	Stage 1
2	1	RVC		Ageing and Degeneration	5	15	Compulsory	Stage 1
2	1	RVC		Principles of Infectious Diseases	5	15	Compulsory	Stage 1
2	2	RVC		Control of Infectious Diseases	5	15	Compulsory	Stage 1
2	2	RVC		Principles of Pharmacology	5	15	Compulsory	Stage 1
2	3	RVC		Project	5	30	Compulsory	Stage 1

Stage 2 Optional Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
2	2	RVC		Applied Pharmacology	5	15	Optional	Stage 1
2	2	RVC		Imaging of Disease	5	15	Optional	Stage 1
2	2	RVC		Introduction to Animal Behaviour, Welfare & Ethics	5	15	Optional	Stage 1
2	2	RVC		Introduction to One Health	5	15	Optional	Stage 1

Stage 3 PY (Year Three Placement Year only) Credit and Awards	**Details**
Total Credit to be studied at this stage	120 at Level 6

Optional modules required in addition to compulsory modules	None
Award available for completion of the Stage	Diploma in Higher Education Biological Sciences with Placement Year

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
PY		RVC		Biological Sciences-related Placement Project	6	75	Compulsory	
PY		RVC		Professionalism	6	45	Compulsory	

Stage 3 (Year Three without a Placement Year) Credit and Awards **Stage 4 PY (Year Four with a Placement Year) Credit and Awards**	**Details**
Total Credit to be studied at this stage	120 at Level 6
Optional modules required in addition to compulsory modules	60 or 90 credits
Optional modules required in addition to compulsory modules	60 or 90 credits
Award available for completion of the Stage	BSc (Hons) Biological Sciences with Placement Year

Stage 3 (Year Three without a Placement Year) Compulsory Studies
Stage 4 PY (Year Four with a Placement Year) Compulsory Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
3		RVC		Designated Biological Sciences Project	6	60	Compulsory	Stage 2
3		RVC		Designated Biological Sciences Project	6	30	Compulsory	Stage 2

Stage 3 Optional Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
3	Term 1 or Term 2	RVC		Biological Sciences Critical Literature Review	6	30	Optional	30 credit Designated Biological Sciences Project
Year 3, Term 2 (Year 4, Term 2		RVC		Advanced Concepts in Biobusiness	6	15	Optional	

for Placement Year)							
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Advanced Concepts in Reproduction	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Advanced Concepts in Skeletal Pathobiology	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Animal Behaviour and Cognition	6	15	Optional	
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Animals and Human Society	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Applications of Pathology	6	30	Optional	Principles of Pathology
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Applied Animal Welfare	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Applied Molecular Microbiology	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Comparative Animal Locomotion	6	30	Optional	
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Comparative Anatomy	6	15	Optional	

Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Comparative Models of Disease	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Development and Disease	6	15	Optional	
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Ecology: Individuals, Populations & Communities	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Endocrine and Metabolic Syndromes	6	15	Optional	
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Epidemiology: the Bigger Picture	6	15	Optional	
Year 3, Term 2 (Year 4, Term 2 for Placement Year)	RVC		Infection and Immunity	6	30	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Omic Approaches to Biology	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Parasitology of Human and Veterinary tropical Diseases	6	15	Optional	
Year 3, pre-Term 1 (Year 4, pre-Term 1 for Placement Year)	RVC		Practical Investigative Biology	6	15	Optional	
Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Principles of Pathology	6	30	Optional	Applications of Pathology

Year 3, Term 1 (Year 4, Term 1 for Placement Year)	RVC		Science of Animal Welfare	6	15	Optional	
Year 3, Terms 1 & 2 (Year 4, Terms 1 & 2 for Placement Year)	King's College London		Various KCL modules	6	15 or 30	Optional	

Stage 4 (Year Four without a Placement Year) Credit and Awards **Stage 5 (Year Five with a Placement Year) Credit and Awards**	**Details**
Total Credit to be studied at this stage	120 at Level 7
There are no optional modules	
Awards available for completion of the Stage	MSci Biological Sciences MSci Biological Sciences with Placement Year (PY)

Stage 4 (Year Four without a Placement Year) Compulsory Studies
Stage 5 (Year Four without a Placement Year) Compulsory Studies

Year	Term	Delivery Institution	Module Code	Module Title	Level	Credit Value	Status for Award	Prerequisites
Year 4, Term 1 (MSci only) (Year 5 for Placement Year)			RVC	Research Skills	7	15	Compulsory	
Year 4 (MSci only) (Year 5 for Placement Year)			RVC	Biological Sciences Research Project	7	105	Compulsory	

KCL = King's College London
PY = Placement Year
RVC = Royal Veterinary College

Version Number	Amended by	Date
1.0	Academic Quality Manager	17.06.20
1.1	Course Director	12.08.20
1.2	Sciences Course Support	13.8.20

	Manager	
1.3	Sciences Course Support Manager	30.06.21
1.4	Academic Quality Manager	10.08.21
1.5	Course Director & Sciences Course Support Manager	25.04.22
1.6	Academic Quality Manager	05.01.2023
1.7	BSc/MSci Course Director	tbc