



1. Programme Title(s) and Code(s):

<i>Programme Title</i>	<i>UCAS Code</i>	<i>GU Code</i>
Bachelor of Veterinary Medicine and Surgery	D100	D100-2104

2. Academic Session:

2018-19

3. SCQF Level (see [Scottish Credit and Qualifications Framework Levels](#)):

11

4. Credits:

660

5. Entrance Requirements:

Please refer to the current undergraduate prospectus at: <http://www.gla.ac.uk/undergraduate/prospectus/>

6. ATAS Certificate Requirement (see [Academic Technology Approval Scheme](#)):

ATAS Certificate not required

7. Attendance Type:

Full Time

8. Programme Aims:

Veterinary science is the study, diagnosis, treatment and prevention of disease in animals; both as individuals and as groups.

The BVMS programme is designed to imbue the knowledge, philosophy, professional and technical skills required to practice the art and science of veterinary medicine and surgery, preparing graduates to enter a profession that anticipates life-long learning and continuing professional development. In achieving these objectives, student are enabled to meet the requirements of accreditation bodies; Quality Assurance Agency for Higher Education (QAA), EAEVE, AVMA, and RCVS, where the latter 2, respectively, have identified clinical and

¹ This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if full advantage is taken of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each course can be found in course handbooks and other programme documentation and online at www.gla.ac.uk/

The accuracy of the information in this document is reviewed periodically by the University and may be checked by the Quality Assurance Agency for Higher Education.

day 1 core competencies expected of graduating students.

The programme aims

- To develop an understanding of the structure and function of healthy animals and the role of management practices in promoting animal welfare
- To develop an understanding of the mechanisms of disease in animals and to recognise the importance of prevention, therapy and surgical intervention in maintaining animal welfare
- To develop an ethical approach and an appreciation of the broader societal importance of animal health and welfare. This includes the economic, public health, environmental and legal considerations which must inform veterinary practice
- To support individual personal and professional development to produce confident, adaptable, reflective individuals who have a clear understanding of the roles and responsibilities of the veterinary professional
- To develop an understanding of the scientific method, the role of research and the capacity for critical evaluation, which forms the basis of life-long learning, and underpins professional decision making.
- To provide opportunities to develop and demonstrate the specific practical, clinical and professional skills, knowledge and attributes which are considered by the relevant accrediting bodies (RCVS, AVMA, EAIVE, QAA) to be essential competencies for the graduating veterinary professional.

9. Intended Learning Outcomes of Programme:

The programme provides opportunities for students to develop their knowledge, clinical and professional skills so that they meet the requirements of the accrediting bodies. The intended learning outcomes for the programme are therefore described below in an amended form of the Royal College of Veterinary Surgeons Day One Competencies:

By the end of the programme the student will be able to:

Knowledge and Understanding

Demonstrate a thorough knowledge and understanding of:

1. The sciences on which the activities of veterinary surgeons are based
2. Research methods and the contribution of basic and applied research to all aspects of veterinary science
3. How to evaluate evidence
4. The structure and functions of healthy animals, and all aspects of their husbandry
5. The aetiology, pathogenesis, clinical signs, diagnosis and treatment of the common diseases and disorders that occur in the common domestic species in the UK
6. Legislation relating to the welfare (including transport) of animals and notifiable diseases
7. Medicines legislation and guidelines on responsible use of medicines
8. The principles of disease prevention and the promotion of health and welfare
9. Veterinary public health issues including zoonoses.

Skills and other Attributes

Subject specific/practical skills

Demonstrate their ability to undertake the following:

1. Obtain an accurate and relevant history of the individual animal or animal group, and its/their environment
2. Handle and restrain an animal safely and humanely, and instruct others in performing these techniques
3. Perform a complete clinical examination
4. Attend all species in an emergency and perform basic first aid
5. Assess correctly the nutritional status of an animal and be able to advise the client on principles of husbandry and feeding
6. Collect, preserve and transport samples, perform standard laboratory tests, and interpret the results of those generated in-house, as well as those generated by other laboratories
7. Use radiographic, ultrasonic, and other technical equipment which can be used as a diagnostic aid, safely and in accordance with current regulations
8. Follow correct procedures after diagnosing notifiable, reportable and zoonotic diseases
9. Know and apply the RCVS twelve Principles of Certification correctly
10. Access the appropriate sources of data on licensed medicines; prescribe and dispense medicines correctly and responsibly in accordance with relevant legislation and ensure that medicines and waste

- are safely stored and/or disposed of
11. Correctly apply principles of sterilisation of surgical equipment
 12. Correctly apply principles of aseptic surgery
 13. Safely perform sedation, general and regional anaesthesia, implement chemical methods of restraint, and assess and control pain
 14. Advise on, and administer appropriate treatment
 15. Recognise when euthanasia is necessary and perform it humanely, using an appropriate method, whilst showing sensitivity to the feelings of owners and others, and with due regard to the safety of those present; advise on disposal of the carcase
 16. Perform a basic gross post mortem examination, record details, sample tissues, store and transport them
 17. Perform ante mortem inspection of animals destined for the food chain and correctly identify conditions affecting the quality and safety of products of animal origin
 18. Assess and implement basic health and welfare records (and production records where appropriate)
 19. Advise on, and carry out preventive and prophylactic programmes appropriate to the species and commensurate with accepted animal health, welfare and public health standards, seeking advice and assistance where necessary from professional colleagues
 20. Minimise the risks of contamination, cross infection and accumulation of pathogens in the veterinary premises and in the field.

Intellectual skills

Demonstrate understanding of and reflect upon:

1. The ethical responsibilities of the veterinary surgeon in relation to individual patient care and client relations, and also more generally in the community in relation to their possible impact on the environment and society as a whole
2. The economic and emotional climate in which the veterinary surgeon operates, and respond appropriately to the influence of such pressures
3. The importance of using their professional capabilities to contribute as far as possible to the advancement of veterinary knowledge in order to benefit veterinary practice and further improve the quality of animal care and public health
4. The need and professional obligation to a commitment to continuing education and training, and professional development, throughout their professional life

Transferable/Key skills

Demonstrate the ability to:

1. Communicate effectively with clients, the lay public, professional colleagues and responsible authorities; listen effectively and respond sympathetically to clients and others, using language in a form appropriate to the audience and the context
2. Prepare clear case reports and maintain patient records in a form satisfactory to colleagues and understandable by the public
3. Work effectively as a member of a multi-disciplinary team in the delivery of services to clients
4. Demonstrate an elementary knowledge of the organisation and management of a veterinary practice.
5. Conduct them self in a professional manner with regard to the veterinary surgeon's professional and legal responsibilities and demonstrate an understanding and application of the principles in the ethical codes as set out in the RCVS Guide to Professional Conduct
6. Demonstrate an ability to cope with uncertainty and adapt to change
7. Demonstrate a capacity for self-audit and willingness to participate in the peer-review process
8. Demonstrate an awareness of personal limitations, and demonstrate awareness of when and from where to seek professional advice, assistance and support.

10. Typical Learning and Teaching Approaches:

The learning and teaching approaches adopted in the BVMS programme are summarised as follows:
clinical rotations (*including clinical case work, supported by a range of structured activities such as clinical rounds, regular case discussions and clinic based tutorials*)
clinical skills training (*including animal handling*)
clinical-pathological demonstrations
collaborative learning

e-learning
essays
laboratory practicals
lectures
oral presentations
Peer assisted learning (*for example participation in peer-assessment*)
professional portfolio (*supports reflection on experiences and professional development planning*)
self-directed learning
seminars
supported self-directed learning (*structured activities designed to engage students in independent, active and collaborative learning and providing feedback on progress*)
tutorials
workplace visits (*to support experiential learning and interaction with professional role models*)

11. Typical Assessment Methods:

All assessment, except for final award grades and degree classifications, is conducted in the immediate context of the courses comprising the programme. The intended learning outcomes indicated in Field 10 are, however, generic to the programme as a whole and the extent of any individual student's attainment of them will be demonstrated as follows:

Assessment of Knowledge and Understanding

The student's knowledge and understanding of the principles and practice of veterinary medicine and surgery will be assessed in the written examinations (multiple choice, data handling and short answer questions formats) set within the foundation and clinical phase courses (BVMS 1,2,3 and 4). In addition, they will be assessed in the coursework (collaborative learning assignments, self-directed learning assignments) in each course (BVMS 1-4).

During the professional phase of the programme (BVMS 5), the student's knowledge and understanding of the principles and practice of veterinary medicine and surgery will be assessed in the written examination set in the BVMS 5 course using question formats including multiple response questions, short answer questions and clinical decision making/data interpretation questions. Clinical decision making and data interpretation question formats use are based around clinical data (e.g. images, test results) within a short answer or form-completion format.

Assessment of Skills and Other Attributes

The student's subject specific/practical skills will be assessed in the foundation (BVMS 1 and 2 courses) and clinical (BVMS 3 and 4 courses) phases through objective structured clinical examinations (OSCEs), collaborative learning assignments, self-directed learning assignments (including simulated management of notifiable, reportable and zoonotic disease). During all phases of the programme, practical competencies will be assessed in workplace based assessments e.g. directly observed procedural skills (DOPs) and mini-clinical evaluation exercise.

The student's acquisition of general professional skills and attributes (intellectual skills and transferable/key skills) will be assessed in the foundation (BVMS 1 and 2 courses) and clinical (BVMS 3 and 4 courses) phases through collaborative learning assignments, self-directed learning assignments (including oral presentations), objective structured clinical examinations and the professional portfolio. During all phases of the programme, general professional skills and attributes (intellectual skills and transferable/key skills) will be assessed in workplace based assessments e.g. DOPs and mini-clinical evaluation exercise and through the professional portfolio (including a cause for concern system).

12. Programme Structure and Features:

Basic structure and Progress

The BVMS programme is 5 academic sessions in duration, in accordance with EC Directive 2005/36. Accelerated 3 and 4 year programme options are available to individuals who meet specific criteria.

A candidate cannot proceed to the second, third, fourth and final years of the curriculum until he or she has successfully completed all the courses including achieving a pass in all compulsory but non-graded assessments and achieved grade D3 or better in the degree examinations in the preceding session.

Students who do not attain a D3 or better, with the permission of the Progress Committee may repeat a year. In this circumstance a student will be allowed to carry any assessment, for one year only, in which they have achieved D3 or better. In repeating a year they are required to attend all compulsory classes and submit all required work related to the assessment they are carrying, so that their skills/knowledge remain current, as well as the classes and assessments required for the assessment for which they were unsuccessful.

On rare occasions, students may be offered an early exit from the programme. A candidate who has completed all first year courses at grade D3 or better is eligible to receive a Certificate of Higher Education (Animal Health). A candidate who has completed all first year and second year courses at grade D3 or better is eligible to receive a Diploma of Higher Education (Animal Health). A candidate who has completed the first three years of the curriculum for the Degree of BVMS and has achieved grade D3 or better in the examinations prescribed for these courses may be recommended for the award of the Degree of Bachelor of Animal Health.

Extra Mural studies

Accreditation of the BVMS programme by the Royal College of Veterinary Surgeons (RCVS) requires a student to undertake a total of 38 weeks extra mural study (EMS) whilst on the programme. EMS is described by the RCVS as a series of work placements that provide "...students with an unrivalled opportunity to gain real-lifework experience that enhances their university-based studies." Placements are to be undertaken in a range of veterinary context professional and commercial environments. The university requires a student to report their EMS activities and monitors compliance with the RCVS requirements. A student who fails to discharge their EMS obligation cannot graduate. The RCVS EMS Recommendations, Policy and Guidance are available at <http://www.rcvs.org.uk/education/extra-mural-studies-ems/#what>

Phases of the programme

The programme has 5 courses, with each course extending over 1 academic year, grouped into three phases:

Foundation Phase (BVMS 1 and 2): 2 x 120 Credit courses

Clinical Phase (BVMS 3 and 4): 2 x 120 Credit courses

Professional Phase (BVMS 5): 1 x 180 Credit course

Foundation Phase BVMS1 and 2:

The foundation phase aims to provide a firm foundation in knowledge and skills for further clinical study, integrating concepts of structure and function, health and disease in contexts which emphasise the clinical and societal applications of this knowledge and encourage the development of skills for lifelong learning.

There are 3 themes, which are integrated throughout the two foundation phase courses:

- Veterinary Professional and Clinical skills
- Body systems
- Principles of Veterinary Science

Both courses adopt a modular structure, with each module of teaching focused around a specific body system. There are 12 modules across the 2 years of the foundation phase, 6 in BVMS 1 and 6 in BVMS 2. Within each module, there are 2-4 weeks of intensive instruction followed by a week focussed on consolidation and synthesis of content and concepts.

Each module will be based around clinical cases which aim to illustrate and contextualise the basic science teaching (including anatomy and physiology), emphasising the clinical relevance of the systems structure and function lectures. In addition, opportunities will be identified in each module to develop understanding of the key principles of biomolecular sciences, parasitology, pharmacology, microbiology, welfare, ethics, husbandry and

pathology, where possible linking these elements to the clinical cases being discussed. Relevant elements of husbandry, clinical and professional skills will be embedded in the clinical cases, acting as a trigger for practical sessions as well as related didactic teaching.

During the consolidation and synthesis week teaching and learning methods will emphasise the application of knowledge and the development of group work and problem solving skills, using a variety of formative assignment formats.

Clinical Phase: BVMS 3 and 4

The aim of the clinical phase is to build on the foundation phase to provide a broad training in key elements of veterinary professional practice, with a focus on common and important problems and presentations encountered in veterinary work. The approach will emphasise the complex interactions between animals, disease and environments, helping student to develop their own clinical decision making ability. In addition, there will be continued development of the skills and attitudes required to work in the clinical environment and to effectively take responsibility for learning in the subsequent professional phase of the programme.

There are 3 themes:

- Veterinary Professional and Clinical skills
- Case-based Veterinary Studies
- Principles of Clinical Practice

Both clinical phase courses (BVMS 3 and 4) are structured around problem solving and clinical decision making in authentic practice contexts. The clinical phase teaching will further integrate the relevant microbiology, pathology, bio-molecular sciences, pharmacology, husbandry, ethics, parasitology and epidemiology in the context of common and important clinical conditions. In addition, opportunities will be identified to develop understanding of the principles of clinical practice and clinical and professional skills.

The aim of the self-directed and collaborative learning elements of the course are for students to gain experience of the process of working through clinical problems (individually and as groups) and identifying and evaluating appropriate resources to use in the resolution of these problems. Feedback will be provided to enable students to monitor and plan their own learning.

Clinical and professional skills development will be a major emphasis of the clinical phase with tutorials and seminars in key clinical and professional skills being augmented by a programme of workplace-based learning.

Professional Phase BVMS 5

This is the 5th (final) academic session of the professional veterinary programme. In this session learning and teaching are delivered primarily in the professional environment. The professional phase of the Bachelor of Veterinary Medicine and Surgery is to provide an opportunity for students to consolidate and apply their skills and knowledge and demonstrate their attitudes and behaviours in a range of professional environments, so that they can demonstrate attainment across the broad competencies required by the accrediting bodies (European Association of Establishments of Veterinary Education/Royal College of Veterinary Surgeons/American Veterinary Medical Association) for registration as a veterinary professional.

Research activities

The College of Medical, Veterinary and Life Sciences has research activities embedded in its institutes and schools. Students have the opportunity to become involved in research through undertaking an intercalated degree, vacation projects (particularly following BVMS 3) and as a selective option in the professional phase.

The intercalated degree programme represents an opportunity for BVMS students following their second or third year to take either one or two years out of the BVMS programme and study for an additional degree programme (BSc, BSc Vet Sci (Hons), MSc or MRes) after which they then re-enter the BVMS programme.

Accelerated programme options

Students who are members of the FEEPASS programme may undertake BVMS 1 as a study abroad year. Upon successful completion of the FEEPASS programme students will be given accelerated entry into BVMS2 and awarded APL (120 credits) for BVMS1. Students who are members of the FEEPASS+ programme will have undertaken the University of Glasgow School of Veterinary Medicine BVMS1 clinical summer school and will undertake BVMS 2 as a study abroad year. These students will have achieved 40 credits from the summer school and upon successful completion of the FEEPASS+ programme students will be given accelerated entry into BVMS3 and awarded APL for elements of their bachelor's degree (80 credits) and BVMS2 (120 credits). Students may also join the accelerated programme (BVMS2) if they have graduated with an approved honours degree (APL 80 credits) and completed the BVMS1 clinical summer school (40 credits).

13. Programme Accredited By:

American Veterinary Medical Association (AVMA)
European Association of Establishments for Veterinary Education (EAEVE)
Royal College of Veterinary Surgeons (RCVS)

14. Location(s):

Glasgow

15. College:

College of Medical Veterinary and Life Sciences

16. Lead School/Institute:

Veterinary Medicine [REG20300000]

17. Is this programme collaborative with another institution:

No

18. Awarding Institution(s):

University of Glasgow

19. Teaching Institution(s):**20. Language of Instruction:**

English

21. Language of Assessment:

English

22. Relevant QAA Subject Benchmark Statements (see [Quality Assurance Agency for Higher Education](#)) and Other External or Internal Reference Points:

See QAA Benchmark Statement for Veterinary Science
<http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Subject-benchmark-statement-Veterinary-science-.aspx>
See SCQF Level descriptors:
<http://www.scqf.org.uk/The%20Framework/Level%20Descriptors>

23. Additional Relevant Information (if applicable):

Support for students is provided by the Postgraduate/Undergraduate Adviser(s) of Studies supported by University resources such LEADS (www.gla.ac.uk/myglasgow/leads/), Counselling & Psychological Services (www.gla.ac.uk/services/counselling/), the Disability Service (www.gla.ac.uk/services/studentdisability/) and the

Careers Service (www.gla.ac.uk/services/careers/).

The majority of the curriculum is delivered on the Garscube campus (which is approximately 3 miles from the Gilmorehill campus and well served by bus routes). The Garscube campus is the centre of the veterinary school and has significant teaching and social infrastructure and is the location of all the school's clinical activities (Small Animal Hospital, Weiper's Centre for Equine Welfare and Scottish Centre for Production Animal Health and Food Safety). The Garscube estate is also the location of important research activities including the Beatson Institute for Cancer Research, the Henry Welcome building for Comparative Medical Sciences as well as the West of Scotland Science Park and the University sports fields.

Teaching is also undertaken at the University's farm at Cochno (approximately 5 miles from the Garscube campus) which has dairy, beef and sheep units. Apiculture is also undertaken.

At Garscube there is a spacious and well stocked library and a custom built computer centre on site, complemented by wireless network access in many of the teaching and social spaces.

The student support system is considered excellent. Academic support is provided by course leaders with support for professional development provided by mentors, who are allocated a small group of students for their entire time in the School. This academic support is underpinned by an active and responsive Student Support Office, within the Undergraduate School, and a range of specialist services provided by the University. The official support is enhanced by a strong student organisation (Glasgow University Veterinary Medical Association) that delivers an active social life for veterinary students as well as representing them on school committees.

The programme is accredited by the Royal College of Veterinary Surgeons (RCVS), the American Veterinary Medical Association (AVMA) and European Association of Veterinary Educational Establishments (EAVEE). Accreditation by the RCVS and EAVEE allows graduates to seek employment as veterinary surgeons in Europe, Australia, New Zealand and South Africa. AVMA accreditation of the BVMS degree makes graduates eligible to work in North America, once they have passed the North American National Board examinations that are also mandatory for graduates of North American Veterinary Schools. Importantly, there is no requirement to sit specialist examinations for foreign graduates in North America and Canada.

The Destination of Leavers of Higher Education shows a consistently high level of employment.

24. Online Learning:

No

25. Date of approval:

27/04/2018