St. George's University

School of Veterinary Medicine

Curriculum Digest

COURSE DIGEST

NEW CURRICULUM SVM-SGU

St. George's University School of Veterinary Medicine (SGU-SVM) is set to provide an internationally and multispecies-based veterinary medical education with worldwide practice application through high-quality education, community service, diversity, and exposure to biomedical and translational research. SGU-SVM is guided by a One Health/One Medicine philosophy, strengthened by campus-wide collaborations with human medicine, animal and life sciences, and other health professions.

The DVM program prepares students to fulfill the Veterinary Day-1 Competencies as outlined by the American Veterinary Medical Association (AVMA) and the American Association of Veterinary Medical Colleges (AAVMC).

EXECUTIVE SUMMARY

SGU's DVM degree program combines three (3) years or six (6) terms of classroom and hands-on practical/laboratory sessions in Grenada (127 credits), followed by one year or 48 weeks (48 credits) of clinical training at one of SVM's affiliated universities and clinics in the US, UK, Canada, Ireland, Australia, and the Netherlands.

Each of the six (6) terms in Grenada consists of one (1) course per term, which is divided into three (3) units:

1. **Professional Skills Unit** (PSl to PS5 with 2 credits each and PS6 with 2.5 credits)
2. **Clinical Skills Unit** (CS1 to CS5 with 2 credits each and CS6 with 2.5 credits)
3. **Systems Unit** (SYS1 to SYS6 with 17 credits each)

All units must be completed with a satisfactory grade to progress to the following term.

1. Professional Skills (PS)

The six PS units taught in terms 1 through 6 are designed to equip students with the essential professional attributes and competencies necessary for success in their academic pursuits and future careers. The units build on each other and cover selected topics from these six (6) Professional Skills domains, including l. Career and Personal Development, Leadership, Diversity, Equity, Inclusion, and Accessibility (DEIA); 2. Wellbeing; 3. Ethics and Clinical Governance; 4. Communication; 5. Financial Literacy and Practice Management; and 6. Scholarship, Evidence-Based Veterinary Medicine, and Life-Long Learning. Throughout the curriculum, students engage in a variety of coursework and activities tailored to foster growth in areas such as emotional intelligence, collaboration, ethical decision-making, and communication skills. Discussions and application of knowledge and skills on topics such as career planning, mental fitness, and responsible financial and practice management underscore SVM's holistic approach toward preparing students for the multifaceted demands of the veterinary profession. The units promote a sense of community and support among students as they progress toward becoming competent, compassionate, and well-rounded veterinary professionals.

2. Clinical Skills (CS)

The six (6) CS units taught in terms 1 through 6 present the core practical clinical skills that equip students with the technical hands-on proficiency essential for Day-1 clinical practice. The CS units cover animal behavior, safety, handling and restraint, physical and specialty examinations,

and medical, surgical, and diagnostic skills. To ensure the safety of students and animals, anesthesia and surgery will be practiced on models prior to performing live animal surgery. Skills will be further enhanced during clinical rotations in both small and large animal settings in Grenada.

3. Systems (SYS)

Six (6) System units are presented in terms 1 through 6, divided into two "spirals":

Systems - Spiral 1: Healthy Animals and Disease Processes.

The first three (3) system units, in terms 1 to 3, focus on core medical knowledge. Every body system is presented as a module, focusing on the structure and function of each system in healthy animals and progressing into basic disease processes and general treatment options. Each module contains instructor-led lessons introducing case-based learning techniques (CBL) to emphasize clinical reasoning in the first spiral.

Systems - Spiral 2: The Clinical Approach and Case Management.

The subsequent units in terms 4 to 6 revisit every organ system and focus on the clinical approach and case management, emphasizing the necessary clinical reasoning skills to manage cases. Each module will continue to use case-based learning techniques (CBL) to emphasize clinical reasoning, tie basic sciences concepts to clinical medicine, and teach a logical approach to clinical case management; in the second spiral, the cases will be more complex and will require more student evaluation and contributions as the curriculum progresses.

NOTE: The second spiral is currently under construction. Changes can be expected.

Each of the units of the system in spiral 2 will cover clinical presentation and case management, including treatments, prognosis, clinical resources, nutritional recommendations, and evidence-based best practices for commonly seen conditions and diseases in general practice for each of the following modules:

FIRST SPIRAL

Term-1 / Professional Skills (PS1; 2 credits: Didactive 1.1 credits and practical/laboratory 0.9 credits)

- **PS Unit 1 (PS1):** PS1 focuses on specific coursework and activities emphasizing learning strategies, pedagogical approaches, emotional intelligence, growth mindset, collaboration and teamwork, DEIA, ethical principles and personal responsibilities, well-being, personal finance, career planning, scholarship and research opportunities among others are included. This unit provides the foundation for students' academic and professional careers by developing a sense of community and support within their class as they advance together as junior professionals. As they progress through the curriculum, they will continue to apply these professional skills and develop new abilities/competencies.

Term-1 / Clinical Skills (CS1; 2 credits: Practical/laboratory 2 credits)

- **CS Unit 1 (CS1):** CS1 focuses on building introductory core clinical skills necessary to produce a day-one competent veterinarian. Students are introduced to fundamental skills that must be performed to a specified standard prior to the student being allowed to

progress to the next portion. This ensures student and animal safety as well as skill acquisition and retention. Interactive laboratory sessions practicing hands-on skills, along with associated out-of-class student work in the form of supplementary and supportive pre- and post- laboratory work, reinforce skills and allow repeated exposure and practice with learning materials. As the students progress through the curriculum, they will continue to apply these clinical skills and develop new abilities and competencies. During the first term, students will be able to identify and locate the learning spaces across SGU's campus, including live animal and simulated laboratory spaces, as well as appropriate conduct and biosecurity measures required within each of these spaces. Students will perform appropriate surgical instrument handling, bandage application to the distal limb of the dog and horse, behavior evaluation, and safe handling of small and large animals, including the cat, dog, horse, cow, goat, and sheep. They will be able to safely handle a needle and syringe and withdraw injectable medications, perform different injection skill techniques, use medical math to correctly calculate medication dosages, and write basic instructions for administering medications for the owner. Students will be introduced to basic clinical pathology diagnostic skills and will have completed Fear Free Certification by the end of the first term.

Term-1 /System-1 (17 credits: Didactive 14.3 credits and practical/laboratory 2.7 credits)

- **Veterinary Foundation**: The veterinary foundation module aims to guide the students in their preparation to initiate the system- and case-based DVM curriculum. The students will describe and explain the veterinary profession's role in population medicine and individual-case medicine by integrating the overall structure and function of the body systems from a clinical problem-solving perspective. Emphasis is placed on introducing the structure and function of cells, tissues, organs, and systems. Pathophysiologic responses to injury and cellular adaptation and healing mechanisms will be presented.
- **Infection and Immunity**: Students will learn about the body's defense against infectious and non-infectious insults. The course will introduce basic concepts and the classification of microbial pathogens. The structure and function of the Innate and Acquired immune components and the pathogenesis of responses to infectious agents and tumors will be emphasized. Cases involving important veterinary examples will be explored. Drug categories that target microbes and immune mechanisms will be introduced. The major diagnostic tests that assess innate and acquired immunity and diagnostic tests based on immunology will be covered. Students will gain experience determining when these tests are used and interpreting test results. The major kinds of vaccines used in veterinary medicine will be covered, and the pros/cons and types of immune responses generated will be discussed. The main disease processes of immunopathologies and the basic diagnostic assessments of these conditions will be introduced.
- **Cardiovascular and Respiratory System**: The cardiovascular and respiratory module aims to guide the students in learning to recognize and explain the cardiovascular and respiratory system in the context of a healthy animal and the basic pathological processes. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating the overall structures and functions of the cardiovascular and respiratory systems is promoted using a clinical problem-solving perspective, highlighting the pathological processes that explain the most common clinical presentations in primary care. Emphasis is placed on describing the erythron, hemostasis, and the cardiovascular and respiratory system.

Term-2 / Professional Skills (PS2; 2 credits: Didactive 1.6 credits and practical/laboratory 0.4 credits)

- **PS Unit 2 (PS2):** Specific coursework and activities will emphasize the understanding of career paths in veterinary medicine, guiding students to identify various trajectories and to prepare compelling application portfolios. Students will develop essential interviewing skills and engage in discussions and implementation of emotional intelligence, conflict management, and cultural humility skills relevant to veterinary practice. The unit will address mental fitness and the impact of perfectionism and imposter syndrome on the individual and the profession. Students will delve into the meaning of Professional Conduct with ethical implications, practicing communication skills using the Calgary Cambridge Model and modeling effective feedback exchange. In addition, the unit encompasses topics such as the significance of the Human-Animal Bond in veterinary communication, evaluation of personal financial standing, discussion of introductory financial concepts in veterinary practice management, and exploration of bioethics and responsible conduct in scientific research and writing.

Term-2 / Clinical Skills (CS2; 2 credits: Practical/laboratory 2 credits)

- CS Unit 2 (CS2): After successfully progressing to term 2, Students will develop fundamental clinical competencies through hands-on training in various physical examinations and medical procedures this semester. They will master the small animals, ruminants, and equine general physical exam, starting with a model and progressing to the live animal when appropriate. Additionally, introductory basic surgery sessions will continue to provide experience with instrument handling, introduction of suture patterns, knot tying, and building upon skills introduced in CS1.

Term-2 / System-2 (17 credits: Didactive 15.6 credits and Practical/laboratory 1.4 credits)

- **Hormones and Regulation**: The hormones and regulation module aims to guide the students in learning the most important hormones involved in regulating body functions and homeostasis in healthy animals. Hormones to be covered will be grouped according to the endocrine glands where they are produced. This module also guides the students in understanding the basic pathogenesis of the most common endocrinopathies in domestic animals, with special emphasis on dogs and clinically relevant comparisons for other species. The module leads the student to become familiarized with basic endocrinology terminology and proficient in basic scientific principles to achieve day-one competencies. Integrating the structure and function of the endocrine system and its relationship with the central nervous system. Different hormones that are going to be covered in this module will be grouped according to the endocrine gland where they are produced.
- **Urinary Tract and Water Balance**: The Urinary Tract and Water Balance module aims to guide the students in learning to recognize and explain the water balance and renal elimination of waste products as a body system in the context of a healthy animal and the basic pathogenesis. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating the overall structures and functions involved in maintaining water balance and renal elimination as a body system is promoted using a clinical problem-solving perspective, highlighting the pathogenesis that explains the most common clinical presentations in primary care. Emphasis is placed on describing the kidneys and lower urinary tract structures and functions along the pathogenesis of common and clinically relevant case examples.
- **Digestion, Metabolism, and Nutrition**: The gastrointestinal tract, metabolism, and nutrition module aims to guide the students in learning to recognize and explain the

gastrointestinal tract and accessory organs (liver and pancreas) in the context of healthy animals and the basic pathological processes. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating structures and functions is promoted using a clinical problem-solving perspective, highlighting the pathogenesis that explains the most common clinical presentations in primary care. The module also emphasizes the basic and clinically relevant principles of animal nutrition and related clinical presentation.

Term-3 / Professional Skills (PS3; 2 credits: Didactive 1.7 credits and practical/laboratory 0.3 credits)

- **PS Unit 3 (PS3):** Specific coursework and activities offer students a multifaceted exploration of self-awareness, self-regulation, and employability competencies essential for future career success in veterinary practice. Through examining the impact of ableism on veterinarians and clients, students will learn strategies to promote accessibility and inclusivity in veterinary spaces. Mental fitness techniques will be provided to enhance personal and professional wellbeing, while ethical considerations in financial matters within the veterinary profession will underscore the importance of fair and transparent practices. Additionally, students will develop a lifelong learning ethos, recognizing its integral role in professional growth and scholarly engagement. Communication skills will be honed through challenging scenarios, and legal aspects of job contracts will be navigated, empowering students to negotiate fair agreements that safeguard their interests in the veterinary field. Lastly, students will cultivate the ability to critically analyze clinical research studies, enabling evidence-based decision-making and fostering a commitment to scholarly pursuits within the profession.

Term-3 / Clinical Skills (CS3; 2 credits: Practical/laboratory 2 credits)

- **CS Unit 3 (CS3):** Students will refine their diagnostic and procedural skills throughout the semester through immersive, hands-on training. In **clinical pathology**, they will learn to analyze blood, urine, and tissue samples to aid in disease diagnosis and treatment planning. Surgical skills sessions will focus on fundamental techniques such as suturing, tissue handling, and sterile protocols essential for successful surgical outcomes. Training in the basic skills to conduct anesthesia for equine and bovine will be provided, ensuring patient and operator safety during procedures. Additionally, students will perform body system-based clinical exams across various species, including small animals, large animals, and exotics, developing a comprehensive approach to evaluating different body systems and identifying clinical abnormalities.

Term-3 / System-3 (17 credits: Didactive 15.5 credits and Practical/laboratory 1.5 credits)

- **Reproduction and Population Management, including Shelter Medicine**: The reproduction and population management module aims to guide the students in learning to recognize and explain the reproductive system in the context of a healthy animal, the basic pathological processes, and the principles of population management. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating the overall structures and functions of the reproductive system and health management of the herd is promoted using a clinical problem-solving perspective, highlighting the pathological processes that explain the most common clinical presentations in primary veterinary care. Emphasis is placed on describing the reproductive system and population management.

- **Movement and Control**: The movement and control module aims to guide the students in learning to recognize and explain the musculoskeletal system in the context of a healthy animal and the basic pathogenesis. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating the overall structures and functions of the musculoskeletal system is promoted using a clinical problem-solving perspective, highlighting the pathological processes that explain the most common clinical presentations in primary veterinary care. Emphasis is placed on describing the components of the musculoskeletal system and its neural control.
- **Integument and Senses**: The sensing module aims to guide the students in learning to recognize and explain the sensory system, including the introduction to clinically relevant disciplines related to neurology, ophthalmology, and dermatology in the context of a healthy animal and the basic pathologic processes. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Integrating the overall structure and function is promoted using a clinical problem-solving perspective, highlighting the pathologic processes that explain the most common clinical presentations in primary veterinary care. Emphasis is placed on describing the senses' and skin's basic pathological processes.
- **Exotic Animals**: The exotic animal module aims to guide the students in learning to recognize and explain healthy animals and the basic pathological processes. The module leads students to become proficient in basic scientific principles and skills to achieve day-one competencies. Recognition of the unique anatomy and physiology of these species and clinical examination will be emphasized. Optimal husbandry conditions will be identified using a clinical problem-solving perspective, highlighting common pathological processes and clinical presentations in primary veterinary care when conditions are not adequately met.

SECOND SPIRAL (UNDER CONSTRUCTION)

Term-4 / Professional Skills (2 credits)

- **PS Unit 4 (PS4):** Specific coursework and activities offer students a multifaceted exploration through the lens of emotional intelligence, where students will explore social awareness and relationship management, empowering them to navigate complex social interactions effectively. Leadership concepts specific to the veterinary field will be discussed, providing insight into guiding principles shaping the profession's future. Participants will engage with current issues in veterinary medicine, including societal expectations and barriers to care, while also addressing the critical topics of grief, compassion fatigue, and burnout and their impact on the wellbeing of veterinary professionals and clients. Moreover, students will delve into clinical governance, decision-making processes, and communication skills utilizing the Calgary Cambridge Guidelines, enhancing their ability to provide and receive feedback effectively. Additionally, financial aspects of veterinary practice ownership and the application of evidence-based veterinary medicine principles will be explored, equipping students with the tools to make informed decisions in their future careers.

Term-4 / Clinical Skills (2 credits)

- **CS Unit 4 (CS4):** Clinical skills, surgical and anesthesia skills, junior surgery lab 1 (neuters)

Term-4 / Systems-4 (17 credits)

- **Foundations of Clinical Medicine (FCM)**: Designed to assist the students to transition and prepare for the second spiral, as well as selected anesthesia topics in preparation for neuters in the junior surgery laboratory.
- **Infection and Immunity—Clinical Case Management:** The I&I module in the second spiral introduces students to the clinical presentation of the body's most common defense mechanisms against infectious and non-infectious insults, as well as introducing oncology concepts**.**
- **Cardiovascular and Respiratory - Clinical Case Management:** This module will discuss the common cardiovascular and respiratory conditions and diseases.
- **Integument and Sensory - Clinical Case Management:** This module will cover common presentations of dermatologic conditions and diseases, and sensory system abnormalities including seizures.

Term-5 / Professional Skills (2 credits)

- **PS Unit 5 (PS5):** Through specific coursework and activities, students will explore diverse topics vital to the veterinary profession. Through interactive discussions and practical exercises, students will learn conflict resolution techniques and strategies, enabling them to navigate professional disagreements effectively. They will also delve into cultural issues within the veterinary field, gaining insights into how cultural diversity impacts practice dynamics. Additionally, students will examine the importance of creating brave spaces and addressing microaggressions in fostering inclusive workplaces, while also exploring strategies for achieving a healthy work-life integration. Furthermore, the course will cover essential practice management concepts, including ownership considerations, and provide students with the tools to ethically navigate routine and challenging scenarios in veterinary practice. Through critical analysis and communication practice, students will develop the skills needed to make informed decisions in clinical situations while also understanding the implications of clinical governance and the decision-making process in veterinary medicine.

Term-5 / Clinical Skills (2 credits)

- **CS Unit 5 (CS5):** Clinical skills, surgical and anesthesia skills, junior surgery laboratory 2 (spaying), diagnostic skills, and clinical rotations 1.

Term-5 / System-5 (17 credits)

- **Reproduction and Population Medicine - Clinical Case Management:** Two mini modules covering reproduction and population management and control. This will include preparation for canine spays in junior surgery laboratory, as well as topics in shelter medicine.
- **Urinary and Water Balance –Clinical Case Management:** This module will focus on common urinary and renal conditions and diseases.
- **Digestion and Metabolism - Clinical Case Management:** This module will cover common conditions and diseases.
- **Hormones – Clinical Case Management:** This module will cover common endocrinology cases.

Term-6 / Professional Skills (2.5 credits)

- **PS Unit 6 (PS6):** Through specific coursework and activities, students will explore communication, teamwork, self-awareness, and resilience within the context of professional settings. Through interactive sessions, they will learn to evaluate colleagues and deliver effective feedback, fostering a supportive work environment. Students will develop strategies for creating inclusive spaces in veterinary medicine, emphasizing diversity and equity. Essential job interviewing skills will be honed, alongside discussions on professionalism, emotional intelligence, and mental health awareness in the veterinary profession. Practical tools for promoting wellbeing during clinical years and post-graduation will be provided, including responsible social media use and ethical communication practices with the press. Additionally, students will learn about regulatory bodies and practice management concepts, empowering them to uphold high standards in their careers. Through hands-on exercises utilizing the Calgary Cambridge Model, they will refine communication skills for various clinical scenarios and receive constructive feedback. Furthermore, financial literacy and the ethical aspects of lifelong learning will be addressed, preparing students for the challenges and responsibilities of veterinary practice ownership while instilling a commitment to ongoing professional development.

Term-6 / Clinical Skills (2.5 credits)

- **CS Unit 6 (CS6):** Clinical skills, clinical rotations 2, and ambulatories.

Term-6 / System-6 (17 credits)

- **Musculoskeletal and Neurological – Clinical Case Management:** This module will cover common presentations including lameness.
- **Multimorbidity and life-long care:** This module will cover lifelong care, pediatrics, geriatric considerations and multimorbidity.
- **Exotic Animal – Clinical Case Management:** This module will cover wildlife and exotic animals.
- **Transition to Clinical Year 4.:** This module will help prepare students for the transition to clinical year.

YEAR 4 CLINICAL ROTATIONS

The Year 4 Clinical training program encompasses terms 7, 8, and 9. It consists of 48 weeks of clinical training at one of our 29 affiliated AVMA-accredited veterinary schools in the US, UK, Canada, Republic of Ireland, Australia, and the Netherlands. Rotation requirements for the clinical year: forty-eight (48) graded weeks of clinical rotations. Of these 48 weeks, 20 must be comprised of the following:

- Eight (8) weeks of medicine in small (SA) or large Animals (LA)*
- Six (6) weeks of surgery in SA or LA*
- Two (2) weeks each of:
    - Diagnostic imaging
    - Anesthesia
    - Pathology/Clinical Pathology

* The 14 weeks of medicine and surgery MUST include four (4) weeks of large and four (4) weeks of small animals. Any combination of large animal and small animal rotations is allowed and is not species-dependent. Primary care-focused rotations are preferred. The other 28 weeks

can be any graded elective rotations or experiences the affiliate approves and/or requires. Students are eligible for graduation if they have passed all requirements in the veterinary medical curriculum.