

DVM Program Course Catalog

#### Year 1, Semester 1 (Fall)

*VMED 9010, Professional Development 1* (2 credits, 30 hours lecture, 0 hours lab, didactic) This course is the first of five courses within the curriculum focused on veterinary professional development. Through various learning methods, students will be exposed to topics and skills in the domains of communication, leadership, collaboration and accessibility, ethical behavior, wellness, fiscal responsibility and scholarship.

*VMED 8010, Clinical Skills 1* (2 credits, 0 hours lecture, 90 hours lab, laboratory) The first of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. The topics and skills covered in each course align with the subject matter from the concurrent didactic coursework to ensure integration.

*VMED 7000, The Healthy Animal 1* (5 credits, 60 hours lecture, 0 hours lab, didactic) The first of four courses in the first year of the DVM curriculum that aims to equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals through lectures and labs (corequisite VMED7001).

*VMED 7001, The Healthy Animal 1 Lab* (0 credits, 0 hours lecture, 45 hours lab, laboratory) This lab course is a required corequisite of VMED7000. Students will be simultaneously assessed on topics covered in both courses. The labs in this course equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals.

*VMED 7010, The Healthy Animal 2* (5 credits, 60 hours lecture, 0 hours lab, didactic) The second of four courses in the first year of the DVM curriculum that aims to equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals through lectures and labs (VMED 7011).

*VMED 7011, The Healthy Animal 2 Lab* (0 credits, 0 hours lecture, 45 hours lab, laboratory) This lab course is a required corequisite of VMED7010. Students will be simultaneously assessed on topics covered in both courses. The labs in this course equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals.

*VMED 7040, Foundations of Veterinary Medicine* (2 credits, 30 hours lecture, 0 hours lab, didactic)

This course aids students as they begin the DVM program by expanding on their preexisting scientific knowledge base and reframing these concepts into clinically relevant information.

*VMED 7050, Animal Behavior* (1 credits, 15 hours lecture, 0 hours lab, didactic) In this course, students will learn about the behavioral characteristics of domestic animals and the most common behavioral issues encountered in clinical practice.

#### Year 1, Semester 2 (Spring)

*VMED 9020, Professional Development 2* (2 credits, 27 hours lecture, 9 hours lab, didactic and laboratory)

This course is the second of five courses within the curriculum focused on veterinary professional development. Through various learning methods, students will be exposed to topics and skills in the domains of communication, leadership, collaboration and accessibility, ethical behavior, wellness, fiscal responsibility and scholarship.

*VMED 8020, Clinical Skills 2* (2 credits, 0 hours lecture, 90 hours lab, laboratory) The second of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. The topics and skills covered in each course align with the subject matter from the concurrent didactic coursework to ensure integration.

*VMED 7020, The Healthy Animal 3* (5 credits, 60 hours lecture, 0 hours lab, didactic) The third of four courses in the first year of the DVM curriculum that aims to equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals through lectures and labs (VMED 7021).

## *VMED 7021, The Healthy Animal 3 Lab* (0 credits, 0 hours lecture, 45 hours lab, laboratory)

This lab course is a required corequisite of VMED7020. Students will be simultaneously assessed on topics covered in both courses. The labs in this course equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals.

VMED 7030, The Healthy Animal 4 (5 credits, 60 hours lecture, 0 hours lab, didactic)

The fourth of four courses in the first year of the DVM curriculum that aims to equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals through lectures and labs.

# *VMED 7031, The Healthy Animal 4 Lab* (0 credits, 0 hours lecture, 45 hours lab, laboratory)

This lab course is a required corequisite of VMED7030. Students will be simultaneously assessed on topics covered in both courses. The labs in this course equip students with knowledge in anatomy (gross and microscopic), physiology and function, and basic imaging in the healthy animal. Each of the four courses will sequentially cover the various body systems of domestic animals.

*VMED 7060, Immunity and Inflammation* (2 credits, 30 hours lecture, 0 hours lab, didactic)

This course explores the mammalian immune system and the body's response to inflammation and infection.

*VMED 7070, Clinical Pharmacology* (3 credits, 45 hours lecture, 0 hours lab, didactic) This course explores the foundation and application of veterinary medicinal products for both prevention and treatment of animal disease.

#### Year 2, Semester 1 (Fall)

*VMED 9030, Professional Development 3* (2 credits, 30 hours lecture, 0 hours lab, didactic) The third of five courses within the curriculum focused on veterinary professional development. Through various learning methods, students will be exposed to topics and skills in the domains of communication, leadership, collaboration and accessibility, ethical behavior, wellness, fiscal responsibility and scholarship.

*VMED 8030, Clinical Skills 3* (2 credits, 0 hours lecture, 90 hours lab, laboratory) The third of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. The topics and skills covered in each course align with the subject matter from the concurrent didactic coursework to ensure integration.

*VMED 7080, The Diseased Animal 1* (4 credits, 60 hours lecture, 0 hours lab, didactic) The first of four courses in the second year of the DVM curriculum aims to equip students with clinically relevant knowledge in pathology, bacteriology, mycology, virology, parasitology, basic level pharmacology, and diagnostic imaging in the diseased animal. Each of the four courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. Course material will be presented using clinical case-based scenarios incorporated into lectures, labs, and group learning activities. *VMED 7090, The Diseased Animal 2* (4 credits, 60 hours lecture, 0 hours lab, didactic) The second of four courses in the second year of the DVM curriculum aims to equip students with clinically relevant knowledge in pathology, bacteriology, mycology, virology, parasitology, basic level pharmacology, and diagnostic imaging in the diseased animal. Each of the four courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. Course material will be presented using clinical case-based scenarios incorporated into lectures, labs, and group learning activities.

*VMED 7120, Clinical Pathology* (3 credits, 41 hours lecture, 12 hours lab, didactic and laboratory)

Case based course that equips students with the knowledge and skills necessary when examining and diagnosing patients using laboratory analysis (hematology, clinical chemistry, urinalysis, cytology).

*VMED 7130, Anesthesia* (3 credits, 45 hours lecture, 0 hours lab, didactic) This course equips students with foundational knowledge and skills necessary to perform veterinary anesthesia and pain management in animal patients.

*VMED 7140, Public Health and Epidemiology* (1 credits, 15 hours lecture, 0 hours lab, didactic)

This course aims to equip students with a foundation in epidemiology, veterinary public health, antimicrobial stewardship and herd health in the framework of clinical veterinary medicine, One Health principles and community service.

### <u>Year 2, Semester 2 (Spring)</u>

*VMED 9040, Professional Development 4* (2 credits, 27 hours lecture, 9 hours lab, didactic and laboratory)

This course is the fourth of five courses within the curriculum focused on veterinary professional development. Through various learning methods, students will be exposed to topics and skills including personal development, inclusive excellence, self-care, ethics and animal welfare, communication skills, business and financial literacy and evidence based veterinary medicine based on the AAVMC CBVE Domains of Competence and the CVM Program Learning Outcomes. This course builds upon topics introduced in VMED9010, VMED9020 and VMED9030.

*VMED 8040, Clinical Skills 4* (2 credits, 0 hours lecture, 90 hours lab, laboratory) The fourth of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. The topics and skills covered in each course align with the subject matter from the concurrent didactic coursework to ensure integration.

VMED 7100, The Diseased Animal 3 (4 credits, 60 hours lecture, 0 hours lab, didactic)

The third of four courses in the second year of the DVM curriculum aims to equip students with clinically relevant knowledge in pathology, bacteriology, mycology, virology, parasitology, basic level pharmacology, and diagnostic imaging in the diseased animal. Each of the four courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. Course material will be presented using clinical case-based scenarios incorporated into lectures, labs, and group learning activities.

*VMED 7110, The Diseased Animal 4* (4 credits, 60 hours lecture, 0 hours lab, didactic) The fourth of four courses in the second year of the DVM curriculum aims to equip students with clinically relevant knowledge in pathology, bacteriology, mycology, virology, parasitology, basic level pharmacology, and diagnostic imaging in the diseased animal. Each of the four courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. Course material will be presented using clinical case-based scenarios incorporated into lectures, labs, and group learning activities.

*VMED 7150, Clinical Diagnostic Imaging* (2 credits, 30 hours lecture, 0 hours lab, didactic) Expanding on imaging knowledge from foundational coursework, this course focuses on the use of diagnostic imaging in clinical case management.

*VMED 7160, Small Animal Medicine and Surgery 1* (5 credits, 75 hours lecture, 0 hours lab, didactic)

The first of two small animal medicine and surgery courses, this case-based course is focused on the etiology, pathophysiology, epidemiology, clinical presentation, diagnostic evaluation, treatment (including surgical interventions) and prognosis of commonly observed canine and feline diseases.

#### Year 3, Semester 1 (Fall)

*VMED 8050, Clinical Skills 5* (2 credits, 0 hours lecture, 90 hours lab, laboratory) The fifth of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. The topics and skills covered in each course align with the subject matter from the concurrent didactic coursework to ensure integration. This course guides students as they perform anesthesia and surgery in the live small animal patient under faculty guidance.

*VMED 7170, Small Animal Medicine and Surgery 2* (5 credits, 75 hours lecture, 0 hours lab, didactic)

The second of two small animal medicine and surgery courses. This case-based course is focused on the etiology, pathophysiology, epidemiology, clinical presentation, diagnostic evaluation, treatment (including surgical interventions) and prognosis of commonly observed canine and feline diseases.

*VMED 7180, Equine Medicine and Surgery* (6 credits, 90 hours lecture, 0 hours lab, didactic)

Case based course focused on the etiology, pathophysiology, epidemiology, clinical presentation, diagnostic evaluation, treatment (including surgical interventions) and prognosis of commonly observed equine diseases.

*VMED 7190, Production Animal Medicine and Surgery* (6 credits, 90 hours lecture, 0 hours lab, didactic)

Case-based course focused on the etiology, pathophysiology, epidemiology, clinical presentation, diagnostic evaluation, treatment (including surgical interventions) and prognosis of commonly observed production animal diseases.

#### Year 3, Semester 2 (Spring)

*VMED 9050, Professional Development 5* (3 credits, 42 hours lecture, 9 hours lab, didactic and laboratory)

This course is the fifth of five courses within the curriculum focused on veterinary professional development. Through various learning methods, students will be exposed to topics and skills in the domains of communication, leadership, collaboration and accessibility, ethical behavior, wellness, fiscal responsibility and scholarship.

*VMED 8060, Clinical Skills 6* (6 credits, 0 hours lecture, 270 hours lab, laboratory) The sixth of six courses in the DVM curriculum focused on development of clinical skills required for a competent veterinary practitioner. This sixth course is specifically designed to equip students with the skills necessary to be successful in the final year clerkship courses. Integrating knowledge and skills from the first five semesters, the students will rotate weekly through various on-campus and off-campus experiences, being exposed to the practical aspects of daily practice.

*VMED 8070, Clinical Reasoning and Case Management* (1 credits, 15 hours lecture, 0 hours lab, laboratory)

Student-driven course focused on practice of clinical reasoning skills using simulated case management.

*VMED 7200, Exotic Animal Medicine and Surgery* (3 credits, 45 hours lecture, 0 hours lab, didactic)

Case-based course focused on the etiology, pathophysiology, epidemiology, clinical presentation, diagnostic evaluation, treatment (including surgical interventions) and prognosis of commonly observed diseases in pet birds, reptiles, amphibians, fish and small mammals.

*VMED 7210, Theriogenology* (3 credits, 45 hours lecture, 0 hours lab, didactic) Utilizing the foundational knowledge in anatomy, physiology and husbandry, this course aims to equip students with an integrated view of all aspects of reproductive medicine as it relates to large and small domestic animal species. *VMED 7220, Special Topics (Electives)* (1 credits, 0 hours lecture, 30 hours lab, didactic) Each section of this course focuses on a specific area in veterinary medicine, expanding on the basic information and skills offered in the core curriculum. Students choose three special topics sections based on their career goals and interests. Examples may include: special topics in equine, special topics in shelter medicine, special topics in cardiology.

#### <u>Year 4</u>

*VMED 8100, Required Clerkship: Small Animal General and Community Practice* (2 x 4week blocks, 45 contact hours/credit, 4 credits each for total of 8 credits) This required clerkship equips students with clinical and professional skills through daily, experiential hands-on veterinary work in an off-campus, college overseen small animal general practice (Clinical Partners) and through the Clemson CVM Community Clinic.

## *VMED 8110, Required Clerkship: Large Animal General Practice* (1 x 6-week block, 45 contact hours/credit, 1 credits each for total of 6 credits)

This required clerkship equips students with clinical and professional skills through daily, experiential, hands-on veterinary work through the Clemson CVM Large Animal Ambulatory Service.

*VMED 8120, Required Clerkship: Specialty Practice* (2-week block, 45 contact hours/credit, 2 credits)

This required clerkship equips students with clinical and professional skills through daily, experiential, hands-on veterinary work in an off-campus, college overseen small animal or large animal specialty practice.

## *VMED 8130, Required Clerkship: Diagnostic Pathology* (2-week block, 45 contact hours/credit, 2 credits)

This diagnostic clerkship equips students with case management experience in gross pathology through daily, hands-on work with postmortem examination (necropsy) at the Clemson Veterinary Diagnostic Center (SC State Diagnostic Laboratory).

### *VMED 8140, Required Clerkship: Diagnostic Imaging* (2-week block, 45 contact hours/credit, 2 credits)

This clerkship offers experience through daily case rounds with a board-certified radiologist, reviewing fundamental concepts related to veterinary imaging assessment competencies.

## VMED 8150, *Required Clerkship: Anesthesia & Analgesia* (2-week block, 45 contact hours/credit, 2 credits)

This clerkship offers experience through daily case rounds and case simulations with a board-certified anesthesiologist, reviewing fundamental concepts and demonstrating competence in veterinary anesthesia and pain management.

*VMED 8160, Elective Clerkship* (3 x 4-week blocks, 45 contact hours/credit, 4 credits each for total of 12 credits)

This clerkship equips students with clinical and professional skills through daily, experiential, hands-on veterinary work through on-campus rotations at the Clemson CVM and off-campus rotations at college-overseen sites (Clinical Partners).

*VMED 8170, Externship* (A combination of 2 or 4-week blocks, 45 contact hours/credit, 2-4 credits each for total of 10 credits)

This clerkship equips students with clinical and professional skills through daily, experiential, hands-on veterinary work in off campus clinical sites, selected by the student and approved by the CVM.

*VMED 9060, Licensing Exam Preparation* (4 credits, 15 hours lecture, 0 hours lab, didactic) Small group-based course during the final year of the DVM program designed to prepare students for the NAVLE<sup>®</sup>. Offered Fall of each year.