

# Clemson University Harvey S. Peeler Jr. College of Veterinary Medicine Course Catalog\*

# **Approved Spring 2024**

\*Please note that this course catalog is a draft and has not been approved by all necessary accrediting bodies.

# YEAR 1, Semester 1

## VMED - 7000 - The Healthy Animal 1

5 credits (4 Contact Hours); Lecture

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 & function, and basic imaging in the healthy animal. Each of the 4 courses will sequentially cover the various body systems of domestic animals through lectures and labs. This course will focus on the integumentary, musculoskeletal, and neurologic systems as well as the special senses.

## VMED - 7001 - The Healthy Animal 1 Lab

0 credits (3 Contact Hours; co-requisite lab course to VMED 7000); Lab

This 0-credit lab is a required corequisite of VMED 7000. Topics include anatomy (gross and microscopic), physiology & function, and basic imaging in the healthy animal related to the integumentary system, musculoskeletal system, neurologic system and special senses.

## VMED - 7010 - The Healthy Animal 2

5 credits (4 Contact Hours); Lecture

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 & function, and basic imaging in the healthy animal. Each of the 4 courses will sequentially cover the various body systems of domestic animals through lectures and labs. This course will focus on the cardiovascular and respiratory systems.

### VMED - 7011 - The Healthy Animal 2 Lab

0 credits (3 Contact Hours; co-requisite lab course to VMED 7010); Lab

This 0-credit lab is a required corequisite of VMED 7010. Topics include anatomy (gross and microscopic), physiology & function, and basic imaging in the healthy animal related to the cardiovascular and respiratory systems.



## **VMED - 7040 - Foundations of Veterinary Medicine**

2 credits (2 Contact Hours); Lecture

This course aids students as they begin the DVM program by expanding on their pre-existing scientific knowledge base and re-framing these concepts into clinically relevant information.

#### VMED 7050 - Animal Behavior

1 credit (1 contact hour); Lecture

In this course, students will learn about the behavioral characteristics of domestic animals and the most common behavioral issues encountered in clinical practice.

#### VMED - 8010 - Clinical Skills 1

2 credits (6 contact hours); Lab

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. This course introduces students to biosecurity, safety, handling and physical exams in large and small animal species.

### VMED - 9010 - Professional Development 1

2 credits (2 contact hours); Lecture

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. This course will introduce these domains and lay the foundation for more advanced topic exploration.



# YEAR 1, Semester 2

### VMED - 7020 - The Healthy Animal 3

5 credits (4 Contact Hours); Lecture

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 & function, and basic imaging in the healthy animal. Each of the 4 courses will sequentially cover the various body systems of domestic animals through lectures and labs. This course will focus on nutrition and the gastrointestinal and endocrine systems.

## VMED - 7021 - The Healthy Animal 3 Lab

0 credits (3 Contact Hours; co-requisite lab course to VMED 7020); Lab

This 0-credit lab is a required corequisite of VMED 7020. Topics include anatomy (gross and microscopic), physiology & function, and basic imaging in the healthy animal related to the nutrition and the gastrointestinal and endocrine systems.

Grading, Learning Objectives & Topical Outline – as above

#### VMED - 7030 - The Healthy Animal 4

5 credits (4 Contact Hours); Lecture

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 & function, and basic imaging in the healthy animal. Each of the 4 courses will sequentially cover the various body systems of domestic animals through lectures and labs. This course will focus on the hepatobiliary, urinary, and reproductive systems.

## VMED - 7031 - The Healthy Animal 4 Lab

0 credits (3 Contact Hours; co-requisite lab course to VMED 7030); Lab

This 0-credit lab is a required corequisite of VMED 7030. Topics include anatomy (gross and microscopic), physiology & function, and basic imaging in the healthy animal related to the on the hepatobiliary, urinary, and reproductive systems.

## VMED - 7060 - Immunity and Inflammation

2 credits (2 contact hours); Lecture

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



# VMED - 7070- Clinical Pharmacology

3 credits (3 contact hours); Lecture

This course explores the foundation and application of veterinary medicinal products for both prevention and treatment of animal disease.

### VMED - 8020 - Clinical Skills 2

2 credits (6 contact hours); Lab

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. The course expands on advanced physical examinations and introduces basic therapeutic procedures.

# VMED - 9020 - Professional Development 2

2 credits (2 contact hours); Lecture & Lab

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. In this course, students will create professional documents, explore concepts of well-being in the veterinary profession, conduct a basic client interview and perform a scientific literature search.



# YEAR 2, Semester 1

### VMED - 7080 - The Diseased Animal 1

4 credits (4 Contact Hours); Lecture & Lab

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 4 courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. This course will focus on general pathology, fundamentals of pathogens, and musculoskeletal diseases. Course material will be presented using clinical case-based scenarios.

#### VMED - 7090 - The Diseased Animal 2

4 credits (4 Contact Hours); Lecture & Lab

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 4 courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. This course will focus on diseases of the neurologic system, special senses and gastrointestinal system. Course material will be presented using clinical case-based scenarios.

# VMED - 7120 - Clinical Pathology

3 credits (3 contact hours); Lecture & Lab

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 (3 contact hours); Lecture

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 credit (1 contact hour); Lecture

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

VMED - 8030 - Clinical Skills 3

2 credits (6 contact hours); Lab



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. This course focuses on anesthesia and basic surgical skills.

# VMED - 9030 - Professional Development 3

2 credits (2 contact hours); Lecture

This course is 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. In this course, students will expand their skill set related to leadership, collaboration, and ethics and explore veterinary business ownership.



# YEAR 2, Semester 2

#### VMED - 7100 - The Diseased Animal 3

4 credits (4 Contact Hours); Lecture & Lab

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 4 courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. This course will focus on diseases of the hepatobiliary, urinary and cardiorespiratory systems. Course material will be presented using clinical case-based scenarios.

#### VMED - 7110 - The Diseased Animal 4

4 credits (4 Contact Hours); Lecture & Lab

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 4 courses will sequentially cover the most important veterinary diseases affecting the various body systems of domestic animals. This course will focus on diseases of the endocrine, reproductive, and integumentary systems. Course material will be presented using clinical case-based scenarios.

#### VMED - 7150 - Clinical Diagnostic Imaging

2 credits (2 Contact Hours); Lecture

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 (5 Contact Hours); Lecture

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. This course will focus on nutrition, the gastrointestinal, hepatobiliary, and urogenital systems as well as dermatology, endocrinology, and oncology.

VMED - 8040 - Clinical Skills 4

2 credits (6 contact hours); Lab



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. This course focuses on diagnostic imaging of the live animal and advanced surgical skills on simulation models.

# VMED - 9030 - Professional Development 4

2 credits (2 contact hours); Lecture & Lab

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 in the domains of communication, leadership, collaboration and accessibility, ethical behavior, wellness, fiscal responsibility and scholarship. This course will expand on client communication practices and investigate advanced concepts in each domain.



# YEAR 3, Semester 1

# VMED - 7170 - Small Animal Medicine and Surgery 2

5 credits (5 Contact Hours); Lecture

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. This course will focus on reproductive surgeries, critical care and the cardiorespiratory, hemolymphatic, neurologic, and musculoskeletal systems.

## VMED - 7180 - Equine Medicine and Surgery

6 credits (6 Contact Hours); Lecture

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 (6 Contact Hours); Lecture

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.

#### VMED - 8050 - Clinical Skills 5

2 credits (6 contact hours); Lab

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.



# YEAR 3, Semester 2

# VMED - 7200 - Exotic Animal Medicine and Surgery

3 credits (3 Contact Hours); Lecture

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 (3 Contact Hours); Lecture

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

1 credit (1 Contact Hour; Students take 3 sections of this course within this semester); ; Lecture & Lab

Each section of this group-based discussion course focuses on a specific area in veterinary medicine, expanding on the basic information and skills offered in the core curriculum. Students choose 3 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.

### VMED - 8060 - Clinical Skills 6

6 credits (18 contact hours); Lab

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 5 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 credit (1 Contact Hour); Seminar

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

#### VMED - 9050 - Professional Development 5

3 credits (3 contact hours); Lecture & Lab



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. The final course in this series will focus on preparing students to enter the clerkship courses, ensuring proficiency in client communication, career planning and financial literacy.



### YEAR 4

# VMED - 8100 - Core Clerkship: Small Animal General Practice

4 credits (12 contact hours); Internship

This core clerkship equips students with clinical and professional skills through daily, experiential hands-on veterinary work in a small animal general practice.

## VMED - 8110 - Core Clerkship: Large Animal General Practice

4 credits (12 contact hours); Internship

This core clerkship equips students with clinical and professional skills through daily, experiential hands-on veterinary work in a large animal general practice.

# VMED - 8120 - Core Clerkship: Small Animal Specialty

4 credits (12 contact hours); Internship

This core clerkship equips students with clinical and professional skills through daily, experiential hands-on veterinary work in a small animal specialty or referral practice.

## VMED - 8130 - Core Clerkship: Necropsy

2 credits (6 contact hours);; Internship

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

#### VMED - 8140 - Core Clerkship: Diagnostic Imaging

2 credits (6 contact hours); ; Internship

This clerkship offers case management experience through daily virtual case rounds with a board-certified veterinary radiologist, reviewing fundamental concepts related to clinical diagnostic imaging.

# VMED - 8150 - Elective Clerkship

4 credits (12 contact hours); ; Internship

This elective clerkship equips students with clinical and professional skills through daily, experiential handson veterinary work in pre-approved veterinary practices or industry partners.

### VMED - 8150 - Student Proposed Elective Clerkship

2-4 credits (6-12 contact hours); Internship



This clerkship equips students with clinical and professional skills through daily, experiential hands-on veterinary work in veterinary practices or industry partners selected by the student and approved by the CVM.

# **VMED - 9060 - Licensing Exam Preparation**

4 credits (4 contact hours); Seminar

Virtual, small group discussion-based course during the final year of the DVM program designed to prepare students for the NAVLE®. Offered October of each year.