

# CATALOG ADDENDUM: FEBRUARY 2024

Below are listed additions and corrections to the 2023-24 Bucks County Community College Catalog since its publication. All corrections listed below have been made in the main online catalog sections to which they apply. They do not appear, however, in the PDF version of the full catalog.

# **SECTION 2: MAJORS AND CERTIFICATE PROGRAMS**

<u>Diagnostic Medical Sonography, Associate of Applied Science (Curriculum Code No. 2205)</u>: The program description has been updated to include:

#### Accreditation

The Bucks County Community College Diagnostic Medical Sonography Program follows JRC-DMS standards and is accredited by CAAHEP in the abdomenextended and obstetrics & gynecology concentrations. After completing the program, graduates are eligible to take the abdomen-extended and obstetrics & gynecology registry exams administered by the ARDMS.

Accreditation of the program is by:

Commission on Accreditation of Allied Health Education Programs 9355 – 113th St. N, #7709 Seminole, FL 33775 (727) 210-2350 https://www.caahep.org/

Joint Review Committee on Education in Diagnostic Medical Sonography 6021 University Boulevard
Suite 500 Ellicott City, MD 21043
(443) 973-3251
<a href="https://www.jrcdms.org/">https://www.jrcdms.org/</a>

Engineering Technology, Associate of Applied Science (Curriculum Code No. 2193):

The program description has been updated to reflect a "cybersecurity concentration" in the technical electives category:

- Program Electives superscripts E, F, and G now read:
  - <sup>E</sup> Students may pursue a Cybersecurity Concentration by completing one of the following two options: (1) Complete CISC110, CISC115 OR CISC119, CISC128, CISC143, CISC206. (2) Complete CISC115 OR CISC119, CISC128, CISC201 OR CISC202, CISC206.
  - F Certifications from Center for Workforce Development, internships, and prior work experience may be approved for credit. Must be approved by the Dean of STEM.
  - <sup>G</sup> You may take 18 directed electives for the nanotechnology certification through Penn State as engineering technology electives. Must be approved by the Dean of STEM.
- "Computer Science Elective" now includes superscripts A,C,F
- "Technical Electives" now includes superscripts D,E,F,G
- The Program's "Total Credit Hours" are updated to 61-63 from 61-62
- The "Technical Electives" are updated to 15-16 from 15

Advanced Technology, Associate of Applied Science (Curriculum Code No. 2207): The program description has been updated.

- Program Electives superscripts H and I now read:
  - <sup>H</sup> Students may pursue a Cybersecurity Concentration by completing one of the following two options: (1) Complete CISC110, CISC115 OR CISC119, CISC128, CISC143, CISC206. (2) Complete CISC115 OR CISC119, CISC128, CISC143, CISC201 OR CISC202, CISC206.
  - <sup>1</sup> Courses, certifications, internships, and prior work experience may be approved for credit. See advisor and/or PLA office to discuss Prior Learning Assessment (PLA) options. Must be approved by the Dean of STEM.
- "Computer Science Elective" now includes superscripts A,B,D,I
- "Technical Electives" now includes superscripts G,H,I

<u>Patient Care Technician, Certificate Program (Curriculum Code No. 3204)</u>: The program description has been updated to include:

Graduates are eligible to sit for national examinations to become certified in the following:

Phlebotomy

- FKG
- Patient Care Technician

<u>Veterinary Technician Program, Associate of Applied Science</u> (Curriculum Code No. 2212): This new program has been approved:

### **Health Sciences**

Founders Hall 112 • Phone 215-968-8353 Curriculum Code No. 2212

The Veterinary Technician Program is designed to equip students with the knowledge, skills, and hands-on experience necessary to pursue a career as a competent and compassionate veterinary technician. This program is structured to meet the rigorous standards set forth by accreditation bodies and prepares students for successful entry into the field of veterinary medicine.

Graduates of this program will be able to:

- Compare animal behavior from multiple species;
- Demonstrate clinical skills for safe animal care and handling;
- Perform diagnostic procedures and laboratory techniques according to current professional standards;
- Explain the principles of veterinary practice management; and
- Apply ethical principles in decision-making.

#### **Degree Course Requirements**

Course	Credits
CHEM101	4
Chemistry A B,2,6,7	
COLL 101	1
College Success Seminar	
COMM 110	3
Effective Speaking B,4,5	
COMP 110	3
English Composition I B,2,10	
COMP 111	3
English Composition II B,2,4,10	
MATH 120	4
College Algebra B,6	
PSYC 110	3
Introduction to Psychology B,2,3,8	
VETT 100	3
Intro to Veterinary Technician	
VETT 150	4
Animal Anatomy & Physiology <sup>B</sup>	
VETT 155	3
Veterinary Professional	
Management B	_
VETT 160	4
Veterinary Laboratory Procedure B,9	
VETT 165	4
Veterinary Diagnostic Imaging and	
Dentistry <sup>B</sup>	
VETT 200	3
Companion Animal Applications <sup>B</sup>	•
VETT 201	3
Research Animal Applications <sup>B</sup>	•
VETT 220	3
Veterinary Pathophysiology <sup>B</sup>	•
VETT 225	3
Large Animal Applications <sup>B</sup>	2
VETT 230	3
Veterinary Pharmacology & Anesthesia <sup>B</sup>	
VETT 235	3
Veterinary Surgery <sup>B</sup>	3
VETT 240	3
Veterinary Intensive Care <sup>B</sup>	3
VETT 280	2
Practical Experience I <sup>B</sup>	_
VETT 285	2
VLII ZUJ	_

Practical Experience II <sup>B</sup> Arts and Humanities Elective <sup>1</sup> <b>Total Credits</b>		3 67	
A Placement testing required B Prerequisite required 1 Satisfies Arts/Humanities 2 Satisfies Critical Thinking 3 Satisfies Diversity 4 Satisfies Information Literacy 5 Satisfies Oral Communication 6 Satisfies Quantitative Literacy 7 Satisfies Scientific Literacy 8 Satisfies Social Sciences 9 Satisfies Technological Competed 10 Satisfies Writing	ence		
Recommended Semester Sequence			
Semester I			
COLL 101 College Success Seminar	1		
CHEM 101	4		
Chemistry A B,2,6,7 COMP110	3		
English Composition I B,2,10  MATH 120	4		
College Algebra B,6 <b>VETT 100</b>	3		
Intro to Veterinary Technician <b>Total Credits</b>	15		
Semester 2			
COMM 110	3		
Effective Speaking B,4,5 COMP 111	3		
English Composition 2 B,2,4,10 <b>PYSC 110</b>	3		
Introduction to Psychology <sup>B,2,3,8</sup> <b>VETT 150</b>	4		
Animal Anatomy & Physiology <sup>B</sup>	•		
VETT 155 Veterinary Professional	3		
Management <sup>B</sup> <b>Total Credits</b>	16		

# Semester 3

VETT 160 Veterinary Laboratory	4
Procedures <sup>B,9</sup> <b>VETT 165</b> Veterinary Diagnostic Imaging	4
and Dentistry <sup>B</sup> Total Credits	8
Semester 4	
A&H	3
Arts and Humanities Elective VETT 200	3
Companion Animal Applications <sup>B</sup> <b>VETT 201</b>	3
Research Animal Applications <sup>B</sup> VETT 220	3
Veterinary Pathophysiology <sup>B</sup>	
<b>VETT 280</b> Practical Experience 1 <sup>B</sup>	2
Total Credits	14
Semester 5	
VETT 225	3
Large Animal Applications <sup>B</sup> <b>VETT 230</b>	3
Veterinary Pharmacology & Anesthesia <sup>B</sup>	
VETT 235	3
Veterinary Surgery <sup>B</sup> <b>VETT 240</b>	3
Veterinary Intensive Care <sup>B</sup>	
<b>VETT 285</b> Practical Experience 2 <sup>B</sup>	2
Total Credits	14

#### **SECTION 3: COURSE DESCRIPTIONS**

<u>College Keyboarding and Document Processing (MEDA140):</u> Master Course Outline, Section VI. Catalog Course Description has been updated to: "Eligibility for exemption determined by Prior Learning Assessment (CREX Test)."

<u>Digital Video Editing (VACV140)</u>: The Master Course Outline, Section V. Other Pertinent Information. The following language has been removed: "The content of the course helps prepare students to sit for certification exams."

<u>Digital Imaging (VAMM100)</u>: The Master Course Outline, Section V. Other Pertinent Information. The following language has been removed: "The content of the course helps prepare students to sit for certification exams."

Introduction to Veterinary Technician (VETT100): This new course has been added:

- I. Course Number and Title: VETT100 Introduction to Veterinary Technician
- II. Number of Credits: 3
- III. Instructional Minutes: 2250
- IV. Pre-reg/Co-reg: None
- V. Other Pertinent Information: None
- VI. Course Description

This course is designed to provide students with a comprehensive overview of the knowledge and skills required as a veterinary technician. It introduces the students to the fundamental concepts, principles, and practices in this profession.

- VII. Required Course Content
  - A. Course Learning Goals

Students will:

- 1. Explain the role and responsibilities of veterinary technicians in the healthcare team;
- 2. Define foundational vocabulary of veterinary medical terminology;
- 3. Explain principles of animal nutrition, including the impact of diet on health and disease; and
- 4. Summarize the history and evolution of veterinary technicians
- B. Sequence of Topics

- 1. The evolution of veterinary technicians
- 2. The role of a veterinary technician
- 3. Medical terminology
- 4. Nutrition
- 5. Health and disease
- 6. Medical records and documentation
- C. Assessment Methods

Exams, quizzes, classroom exercises, and class participation.

D. Reference

See course syllabus

Animal Anatomy & Physiology (VETT150): This new course has been added:

I. Course Number and Title: VETT150 Animal Anatomy & Physiology

II. Number of Credits: 4

III. Instructional Minutes: 3750

IV. Pre-requisite: VETT100 Co-requisite: VETT155

V. Other Pertinent Information: None

VI. Course Description

This course provides a foundation in the biological sciences and prepares students for studies and careers in animal health, veterinary medicine, and research.

- VII. Required Course Content
  - A. Course Learning Goals

Students will:

- 1. Summarize the anatomical and physiological principles that govern the bodies of animals;
- 2. Identify major organ systems and their functions;
- 3. Demonstrate practical laboratory skills, including the ability to use microscopes, perform dissections, and conduct experiments related to anatomy and physiology;
- 4. Integrate anatomical and physiological concepts across multiple animal organ systems; and

- 5. Explain how various systems work together to maintain homeostasis and respond to external stimuli.
- B. Sequence of Topics
  - 1. Introduction to Animal Anatomy & Physiology
  - 2. The Cell and Tissues
  - 3. Skeletal System
  - 4. Muscular System
  - 5. Nervous System
  - 6. Circulatory System
  - 7. Respiratory System
  - 8. Digestive System
  - 9. Excretory System
  - 10. Reproductive System
  - 11. Endocrine System
  - 12. Immune System
  - 13. Integrative Physiology
  - 14. Laboratory Techniques
- C. Assessment Methods
  Unit tests, quizzes, class participation, and laboratory reports.
- D. Reference See course syllabus

Veterinary Professional Management (VETT155): This new course has been added:

- I. Course Number and Title: VETT155 Veterinary Professional Management
- II. Number of Credits: 3
- III. Instructional Minutes: 2250
- IV. Pre-requisite: VETT100 Co-requisite: VETT150
- V. Other Pertinent Information: None
- VI. Course Description

This course equips students with the essential skills and knowledge required to successfully manage and operate a veterinary practice. This course will cover a wide array of topics, including practice management,

financial planning, client relations, leadership, and ethical considerations specific to the veterinary field.

# VII. Required Course Content

# A. Course Learning Goals

Students will:

- 1. Describe the veterinary industry, including its structure, trends, and challenges;
- 2. Model the role of a professional veterinary technician;
- 3. Manage veterinary medical records according to professional standards:
- 4. Demonstrate client communication skills and strategies for building strong relationships with clients and coworkers;
- 5. Discuss legal and ethical issues specific to veterinary practice management; and
- 6. Describe risks for compassion fatigue in veterinary technicians.

## B. Sequence of Topics

- 1. Introduction to Veterinary Practice Management
- 2. Financial Management
- 3. Human Resources and Team Management
- 4. Client Relations and Communication
- 5. Legal and Ethical Considerations
- 6. Leadership and Decision-Making
- 7. Technology and Practice Management Software
- 8. Emergency and Crisis Management

#### C. Assessment Methods

Exams, quizzes, classroom exercises, or class participation.

#### D. Reference

See course syllabus

Animal Anatomy & Physiology (VETT150): This new course has been added:

I. Course Number and Title: VETT150 Animal Anatomy & Physiology

II. Number of Credits: 4

III. Instructional Minutes: 3750

IV. Pre-requisite: VETT100

Co-requisite: VETT155

#### V. Other Pertinent Information: None

# VI. Course Description

This course provides a foundation in the biological sciences and prepares students for studies and careers in animal health, veterinary medicine, and research.

# VII. Required Course Content

# A. Course Learning Goals

Students will:

- 1. Summarize the anatomical and physiological principles that govern the bodies of animals;
- 2. Identify major organ systems and their functions;
- 3. Demonstrate practical laboratory skills, including the ability to use microscopes, perform dissections, and conduct experiments related to anatomy and physiology;
- 4. Integrate anatomical and physiological concepts across multiple animal organ systems; and
- 5. Explain how various systems work together to maintain homeostasis and respond to external stimuli.

#### B. Sequence of Topics

- 1. Introduction to Animal Anatomy & Physiology
- 2. The Cell and Tissues
- 3. Skeletal System
- 4. Muscular System
- 5. Nervous System
- 6. Circulatory System
- 7. Respiratory System
- 8. Digestive System
- 9. Excretory System
- 10. Reproductive System
- 11. Endocrine System
- 12. Immune System
- 13. Integrative Physiology
- 14. Laboratory Techniques

#### C. Assessment Methods

Unit tests, quizzes, class participation, and laboratory reports.

# D. Reference See course syllabus

Veterinary Laboratory Procedures (VETT160): This new course has been added:

I. Course Number and Title: VETT160 Veterinary Laboratory Procedures

II. Number of Credits: 4

III. Instructional Minutes: 3750

IV. Pre-requisite: VETT150 and VETT155

Co-requisite: VETT165

V. Other Pertinent Information

This course satisfies General Education Goal of Technical Competency.

VI. Course Description

This course is designed to provide students with a comprehensive understanding of the fundamental laboratory techniques and procedures used in veterinary medicine. Students gain the knowledge and skills necessary to perform a wide range of laboratory tests and procedures essential for the diagnosis, treatment, and monitoring of animal health.

# VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Explain the importance of laboratory safety protocols and ethical considerations in working with animals and laboratory equipment;
- 2. Demonstrate proficiency in using laboratory instruments effectively and safely;
- Implement proper techniques for collecting and handling various types of biological samples, including blood, urine, feces, and tissues; and
- 4. Process laboratory samples after collection according to current laboratory standards.

# B. Sequence of Topics

- 1. Laboratory equipment and instrumentation
- 2. Sample collection and handling
- 3. Hematology and blood chemistry
- 4. Microbiology and parasitology
- 5. Clinical pathology

- 6. Urinalysis
- 7. Immunology and serology
- 8. Necropsy and post-mortem examination
- 9. Quality assurance and record keeping
- 10. Case studies

#### C. Assessment Methods

Exams, practical laboratory assessments, case studies, and participation in discussions and group projects.

D. Reference

See course syllabus

Veterinary Diagnostic Imaging and Dentistry (VETT165): This new course has been added:

- I. Course Number and Title: VETT165 Veterinary Diagnostic Imaging and Dentistry
- II. Number of Credits: 4
- III. Instructional Minutes: 3750
- IV. Pre-requisite: VETT150 and VETT155

Co-requisite: VETT160

- V. Other Pertinent Information: None
- VI. Course Description

This course provides a detailed exploration of diagnostic imaging and dental care techniques that are vital for diagnosing and treating various medical conditions of animals.

- VII. Required Course Content
  - A. Course Learning Goals

Students will:

- 1. Describe the principles of radiographic imaging, including positioning, exposure, and radiation safety;
- Demonstrate proficiency in a variety of diagnostic imaging techniques of various anatomical regions in small and large animals:

- 3. Label the anatomy and physiology of the oral cavity and dental structures in various animal species; and
- 4. Evaluate a radiographic image for technique in veterinary dentistry.

# B. Sequence of Topics

- 1. Introduction to diagnostic imaging
- 2. Radiographic techniques
- 3. Advanced imaging modalities
- 4. Radiographic techniques
- 5. Dental anatomy and physiology
- 6. Oral examination and treatment
- 7. Case studies and clinical applications

#### C. Assessment Methods

Written exams, practical assessments, case studies, and active participation in clinical scenarios.

D. Reference

See course syllabus

Companion Animal Applications (VETT200): This new course has been added:

- I. Course Number and Title: VETT200 Companion Animal Applications
- II. Number of Credits: 3
- III. Instructional Minutes: 3000
- IV. Pre-requisite: VETT160 and VETT165

Co-requisite: VETT201, VETT220 and VETT280

- V. Other Pertinent Information: None
- VI. Course Description

This course is designed for students working with companion animals, such as dogs, cats, and small mammals. It provides a comprehensive overview of the practical aspects of caring for and working with companion animals, covering topics ranging from pet health and wellness to behavior, training, and enrichment.

#### VII. Required Course Content

A. Course Learning Goals Students will:

- 1. Demonstrate proficiency in conducting comprehensive physical examinations on companion animals;
- 2. Complete diagnostic procedures, such as blood pressure measurement, temperature monitoring, and weight assessment on companion animals;
- 3. Demonstrate safe and gentle techniques for handling and restraining small animals during examinations and treatments; and
- 4. Demonstrate proper venipuncture techniques for blood collection in companion animals.

#### B. Sequence of Topics

- 1. Companion animal health and wellness
- 2. Pet nutrition and feeding
- 3. Pet behavior and training
- 4. Companion animal housing and enrichment
- 5. Pet safety and first aid
- 6. Companion animal welfare and legal consideration
- 7. Pet owner education

#### C. Assessment Methods

Written assignments, practical exercises, quizzes, and participation in discussions and group projects.

D. Reference

See course syllabus

Research Animal Applications (VETT201): This new course has been added:

- I. Course Number and Title: VETT201 Research Animal Applications
- II. Number of Credits: 3
- III. Instructional Minutes: 3000
- IV. Pre-requisite: VETT160 and VETT165

Co-requisite: VETT200, VETT220 and VETT280

- V. Other Pertinent Information: None
- VI. Course Description

This course is designed to provide students with an understanding of the principles and practices related to the ethical and responsible use of

animals in scientific research. This course is aimed at individuals pursuing careers in the field of veterinary science.

# VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Demonstrate proficiency in conducting comprehensive physical examinations on research animals;
- 2. Complete diagnostic procedures, such as blood pressure measurement, temperature monitoring, and weight assessment on research animals;
- 3. Demonstrate safe and gentle techniques for handling and restraining research animals during examinations and treatments; and
- 4. Demonstrate proper venipuncture techniques for blood collection in research animals.

# B. Sequence of Topics

- 1. Ethical considerations
- 2. Animal welfare
- 3. Research techniques
- 4. Species-specific considerations
- 5. Regulatory compliance
- 6. Humane endpoints
- 7. Case studies

#### C. Assessment Methods

Assessment Methods Written assignments, practical exercises, quizzes, and participation in discussions and group projects.

#### D. Reference

See course syllabus

Veterinary Pathophysiology (VETT220): This new course has been added:

I. Course Number and Title: VETT220 Veterinary Pathophysiology

II. Number of Credits: 3

III. Instructional Minutes: 2250

IV. Pre-requisite: VETT160 and VETT165

Co-requisite: VETT200, VETT201 and VETT280

#### V. Other Pertinent Information: None

# VI. Course Description

This course provides the study of the underlying mechanisms of disease and disorders in animals, with a specific focus on domestic and companion animals. It is designed to explain the pathophysiological processes that underlie clinical conditions in animals.

# VII. Required Course Content

# A. Course Learning Goals

Students will:

- 1. Correlate the etiology and pathogenesis of common veterinary diseases with clinical manifestations in various animal species;
- 2. Classify diseases based on their etiology, such as infectious, non-infectious, congenital, genetic, and neoplastic diseases;
- 3. Explain the modes of disease transmission, including direct and indirect transmission, vector-borne diseases, and zoonotic potential; and
- 4. Implement diagnostic techniques, including clinical signs, laboratory tests, imaging studies, and necropsy examinations according to current professional standards.

## B. Sequence of Topics

- 1. Etiology and pathogenesis
- 2. Organ systems
- 3. Immune and inflammatory responses
- 4. Neoplasia and tumor development
- 5. Infectious diseases
- 6. Diagnostic techniques
- 7. Treatment and management
- 8. Zoonotic diseases
- 9. Case studies

#### C. Assessment Methods

Laboratory skills, assignments, quizzes, and participation in discussions and group projects.

#### D. Reference

See course syllabus

Large Animal Applications (VETT225): This new course has been added:

- I. Course Number and Title: VETT225 Large Animal Applications
- II. Number of Credits: 3
- III. Instructional Minutes: 3000
- IV. Pre-requisite: VETT200, VETT201, VETT220 and VETT280 Co-requisite: VETT230, VETT235, VETT240 and VETT285
- V. Other Pertinent Information: None

# VI. Course Description

This course is designed to provide students with knowledge and practical skills for the diagnosis, treatment, and management of large animals, such as horses and livestock in a veterinary setting. This course focuses on the specialized techniques and considerations required to care for these animals effectively.

#### VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Demonstrate proficiency in conducting comprehensive physical examinations on large animals;
- 2. Use diagnostic procedures, such as blood pressure measurement, temperature monitoring, and weight assessment on large animals;
- 3. Employ safe and gentle techniques for handling and restraining large animals during examinations and treatments; and
- 4. Demonstrate proper venipuncture techniques for blood collection in large animals.

#### B. Sequence of Topics

- 1. Anatomy, physiology, and behavior of large animals
- 2. Restraining, handling, and safety of both animals and veterinarians
- 3. Comprehensive physical examinations and diagnostic procedures, including palpation, auscultation, and clinical assessments.
- 4. Large animal nutrition, herd health management, and preventive medicine
- 5. Large animal diseases, their diagnosis, treatment, and prevention; and
- 6. Equine medicine, including dental care, lameness evaluation, and reproductive management.

- C. Assessment Methods Written exams, practical skills assessments, case studies, and group projects.
- D. Reference See course syllabus

Veterinary Pharmacology & Anesthesia (VETT230): This new course has been added:

- Course Number and Title: VETT230 Veterinary Pharmacology & Anesthesia
- II. Number of Credits: 3
- III. Instructional Minutes: 2250
- IV. Pre-requisite: VETT200, VETT201, VETT220, and VETT280 Co-requisite: VETT225, VETT235, VETT240 and VETT285
- V. Other Pertinent Information: None
- VI. Course Description

This course provides the theory and application of basic pharmacology and anesthesiology. The course includes principles of drug administration, dosing and general pharmacologic calculations, pre-anesthesia patient assessment and post-anesthesia monitoring. Students work with various types of anesthetic equipment.

# VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Give examples of drugs used in veterinary medicine, including antimicrobials, analgesics, and anesthetics;
- 2. Discuss the principles of drug absorption, distribution, metabolism, and elimination in animals;
- 3. Explain the pharmacodynamics of a variety of drug classifications;
- 4. Accurately calculate medication dosages;
- 5. Perform a comprehensive pre-anesthetic assessment, including patient history, physical examination, and laboratory tests; and
- 6. Describe laws related to drug handling in a practice.

#### B. Sequence of Topics

- 1. Pharmacology fundamentals
- 2. Drug classes and categories
- 3. Drug administration
- 4. Pharmacology and animal diseases
- 5. Anesthesia principles
- 6. Anesthetic agents
- 7. Anesthetic monitoring
- 8. Anesthetic complications
- 9. Pharmacology and anesthesia safety
- 10. Emerging trends
- 11. Ethical and Legal considerations
- C. Assessment Methods

Quizzes, exams, laboratory reports, case presentations, and a final project.

D. Reference See course syllabus

Veterinary Surgery (VETT235): This new course has been added:

- I. Course Number and Title: VETT235 Veterinary Surgery
- II. Number of Credits: 3
- III. Instructional Minutes: 3000
- IV. Pre-requisite: VETT200, VETT201, VETT220, and VETT280 Co-requisite: VETT225, VETT230, VETT240, and VETT285
- V. Other Pertinent Information: None
- VI. Course Description

This course provides students with a comprehensive understanding of surgical techniques and procedures used in diagnosis, treatment, and management of surgical conditions in animals. This course covers topics related to surgical principles, practices, and patient care in veterinary surgery.

- VII. Required Course Content
  - A. Course Learning Goals Students will:

- 1. Compare the anatomical structures and variations relevant to surgical procedures in various animal species;
- 2. Explain the importance of the principles of aseptic technique, tissue handling, and hemostasis during surgery;
- 3. Demonstrate a variety of suturing techniques, including simple interrupted, continuous, and subcuticular sutures;
- 4. Perform in the scrubbed role for common surgical procedures, such as spaying and neutering, wound repair, and tumor removal; and
- 5. Perform a comprehensive surgical assessment including patient history, physical exam, and laboratory tests.

# B. Sequence of Topics

- 1. Surgical principles
- 2. Preoperative assessment
- 3. Surgical procedures
- 4. Anesthesia and analgesia
- 5. Surgical instrumentation
- 6. Surgical wound management
- 7. Complications and their management
- 8. Postoperative care
- 9. Emergency surgery
- 10. Ethical and legal considerations
- 11. Emerging trends

#### C. Assessment Methods

Exams, practical surgical skills evaluations, case studies, surgical logbooks, and a final project.

#### D. Reference

See course syllabus

Veterinary Intensive Care (VETT240): This new course has been added:

I. Course Number and Title: VETT240 Veterinary Intensive Care

II. Number of Credits: 3

III. Instructional Minutes: 2250

IV. Pre-requisite: VETT200, VETT201, VETT220, and VETT280 Co-requisite: VETT225, VETT230, VETT235, and VETT285

#### V. Other Pertinent Information: None

# VI. Course Description

This course provides students with the knowledge and skills required to provide advanced care for critically ill and injured animals. The course will cover intensive care principles, practices, and patient management.

# VII. Required Course Content

# A. Course Learning Goals

Students will:

- 1. Perform thorough assessments of critically ill patients, including history taking, physical examination, and assessment of vital signs;
- 2. Employ advanced monitoring equipment, such as ECG, blood pressure monitoring, capnography, and pulse oximetry;
- 3. Provide mechanical ventilation and non-invasive respiratory support to animals with respiratory distress; and
- 4. Perform wound management, catheter care, and management of invasive lines according to current professional standards.

#### B. Sequence of Topics

- 1. Principles of intensive care
- 2. Critical care assessment
- 3. Respiratory support
- 4. Hemodynamic monitoring
- 5. Fluid and electrolyte management
- 6. Nutritional support
- 7. Pain management
- 8. Management of sepsis
- 9. Monitoring and diagnostics
- 10. End-of-life and ethical considerations

# C. Assessment Methods

Written examinations, case presentations, critical care logs, clinical skills evaluations, and a final project.

#### D. Reference

See course syllabus

Practical Experience I (VETT280): This new course has been added:

I. Course Number and Title: VETT280 Practical Experience I

- II. Number of Credits: 2
- III. Instructional Minutes: 240 practical hours
- IV. Pre-requisite: VETT160 and VETT165
  Co-requisite: VETT200, VETT201, and VETT220

## V. Other Pertinent Information

Students will be assigned to a facility for 16 hours per week for practical experience.

#### VI. Course Description

This course provides students the opportunity to integrate the academic knowledge, critical thinking, and technical skills developed during the program and directly apply and refine them in a small animal clinical setting.

# VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Discuss the diagnosis, treatment, and management of small animal patients;
- 2. Demonstrate how to handle and restrain animals safely and effectively;
- 3. Correlate diagnostic test results with treatment plans;
- 4. Describe the role of a veterinary technician in routine procedures such as physical examinations, vaccinations, and dental cleanings;
- 5. Explain the importance of confidentiality and client communication in recordkeeping; and
- 6. Analyze laboratory samples after collection.

## B. Sequence of Topics

- 1. Small animal veterinary care
- 2. Routine check-ups
- 3. Diagnostic procedures, surgeries, and treatments
- 4. Techniques for administering medications
- 5. Performing laboratory tests
- 6. Handling, restraining, and examining small animals
- 7. Patient care and management
- 8. Record keeping
- 9. Client communication
- 10. Professionalism and ethics

## 11. Reflective practice

#### C. Assessment Methods

Preceptor evaluations of student performance, and completion of a journal detailing experiences, challenges, and lessons learned.

# D. Reference

See course syllabus

Practical Experience II (VETT285): This new course has been added:

I. Course Number and Title: VETT280 Practical Experience II

II. Number of Credits: 2

III. Instructional Minutes: 240 practical hours

IV. Pre-requisite: VETT160 and VETT165

Co-requisite: VETT225, VETT230, VETT235 and VETT240

V. Other Pertinent Information: None

# VI. Course Description

This course provides students the opportunity to integrate the academic knowledge, critical thinking, and technical skills developed during the program and directly apply and refine them in a small animal clinical setting.

# VII. Required Course Content

A. Course Learning Goals

Students will:

- 1. Perform physical examinations, vaccinations, and routine healthcare examinations on large animals according to current professional standards;
- 2. Apply proper handling and restraint techniques specific to different species, such as cattle, horses, sheep, or swine;
- 3. Describe the role of a veterinary technician in surgical and reproductive procedures on large animals;
- 4. Identify common diseases and health issues in large animal populations; and
- 5. Collect laboratory samples, including blood, feces, and tissue, using current standards in the field.

# B. Sequence of Topics

- 1. Large animal veterinary care
- 2. Routine check-ups
- 3. Diagnostic procedures, surgeries, and treatments
- 4. Techniques for administering medications
- 5. Performing laboratory tests
- 6. Handling, restraining, and examining large animals
- 7. Patient care and management
- 8. Record keeping
- 9. Client communication
- 10. Professionalism and ethics
- 11. Reflective practice

#### E. Assessment Methods

Preceptor evaluations of student performance, and completion of a journal detailing experiences, challenges, and lessons learned.

#### F. Reference

See course syllabus