

EATM M118L: VETERINARY CLINICAL PATHOLOGY LABORATORY

Originator

Ishapiro

College

Moorpark College

Attach Support Documentation (as needed)

RVTProgramJustification.pdf

RVTProgramCourseRequirements.docx

Discipline (CB01A)

EATM - Exotic Animal Training Mgmt

Course Number (CB01B)

M118L

Course Title (CB02)

Veterinary Clinical Pathology Laboratory

Banner/Short Title

Vet Clin Pathology Lab

Credit Type

Credit

Honors

No

Start Term

Fall 2020

Catalog Course Description

Provides application opportunities for performing various clinical examinations and procedures on animals in a veterinary setting. Focuses on the examination of blood, urine, feces, and skin scraping of animals to determine pathology.

Taxonomy of Programs (TOP) Code (CB03)

0102.10 - *Veterinary Technician (Licensed)

Course Credit Status (CB04)

D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)

B (Transferable to CSU only)

Course Basic Skills Status (CB08)

N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)

C - Clearly Occupational

Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)

N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22)

Y - Credit Course

Funding Agency Category (CB23)

B - Partially Developed Using Economic Development Funds

Course Program Status (CB24)

1 - Program Applicable

General Education Status (CB25)

Y - Not Applicable

Support Course Status (CB26)

N - Course is not a support course

Field trips

May be required

Faculty notes on field trips; include possible destinations or other pertinent information

Students may be required to visit local veterinary clinics and or hospitals to obtain hands-on clinical experiences.

Grading method

Letter Graded

Alternate grading methods

Credit by exam, license, etc.

Does this course require an instructional materials fee?

No

Repeatable for Credit

No

Is this course part of a family?

No

Units and Hours

Carnegie Unit Override

No

In-Class

Lecture

Activity

Laboratory

Minimum Contact/In-Class Laboratory Hours

52.5

Maximum Contact/In-Class Laboratory Hours

52.5

Total in-Class

Total in-Class

Total Minimum Contact/In-Class Hours

52.5

Total Maximum Contact/In-Class Hours

52.5

Outside-of-Class**Internship/Cooperative Work Experience**

Paid

Unpaid

Total Outside-of-Class

Total Outside-of-Class

Total Student Learning**Total Student Learning****Total Minimum Student Learning Hours**

52.5

Total Maximum Student Learning Hours

52.5

Minimum Units (CB07)

1

Maximum Units (CB06)

1

Prerequisites

EATM M110, EATM M110L, EATM M120, EATM M120L

Corequisites

EATM M118

Limitations on Enrollment

Criminal background clearance

Drug and alcohol clearance

Fingerprint clearance

Current negative TB test or chest x-ray

Others (specify)

No visible tattoos or visible body piercings except single studs in earlobes

Other Limitations on Enrollment

1. Admission to the Moorpark College Registered Veterinary Technology Program

2. Current tetanus vaccination

Entrance Skills**Entrance Skills**

EATM M110

1. discuss the etiology, symptoms, treatment, veterinary care, and preventive measures for common infectious, zoonotic and systemic diseases of small animals.

2. explain the vaccination concepts related to small animals.

3. identify the components of a wellness program for dogs and cats and explain the importance of preventative care.

4. describe the prevention of infectious disease transmission in the veterinary setting.

5. discuss the spread of parasites between animals and humans.

EATM M110L

1. perform hands-on skills to provide competent and compassionate care such as otic, ophthalmic, dermal, gastrointestinal, and urinary procedures to small companion animals.

2. utilize and maintain various instruments, equipment and supplies used in the assessment and treatment of small animals.

3. use proper technique to position small animals for auscultation, palpation, and other assessments of body systems.

4. demonstrate standard precautions to prevent the transmission of infectious diseases.

5. demonstrate proper technique in administering vaccinations to small companion animals.

6. demonstrate safe technique in performing injections and venipunctures.

EATM M120

1. identify and describe the basic anatomical structures of mammals.
2. identify and utilize basic nomenclature related to anatomy and physiology.
3. explain the relationship between the various anatomical and physiological systems found in normal mammal, avian, and reptile species.
4. discuss in terms of structure and function, the unique anatomical and physiological adaptations of certain groups of mammal, avian, and reptile species.
5. distinguish between the major components of the nervous system and describe the structure and function of the neuron and process of nerve transmission.
6. distinguish between the major components of the reproductive system and describe the structure and function of the ovary.
7. compare the effects of hormones on follicle development.
8. describe the structure and function of the nephron and the effects of hormones on urine formation.
9. distinguish between the different organs that contribute to digestion.
10. compare and contrast the digestive process for major macro-molecules.

EATM M120L

1. distinguish the parts of the brain and major nerves and describe their functions.
2. utilize microscopes and photographs to identify and describe the location and function of epithelial, muscular, nervous, and connective tissues.
3. distinguish the three layers of the skin, the associated structures found within the skin layers, and the structures derived from the skin.
4. differentiate individual bones of the axial and appendicular skeleton using articulated and disarticulated skeletons from common domesticated species.
5. distinguish the surface features of bones of the axial and appendicular skeleton.
6. identify the major joints using articulated and disarticulated skeletons.
7. distinguish the major skeletal muscles and describe their actions.
8. differentiate and describe the functions of the major organs of the respiratory, cardiovascular, digestive, and genitourinary systems.
9. differentiate the major internal organs on radiographs.
10. identify the individual bones and major joints on radiographs.
11. identify on various radiographs anatomical differences between species, gender and age.
12. identify histological differences of the four basic animal tissues and relate normal from abnormal cells.

Requisite Justification

Requisite Type

Prerequisite

Requisite

EATM M110, EATM M110L, EATM M120, EATM M120L

Requisite Description

Course in a sequence

Level of Scrutiny/Justification

Required by statute or regulation

Requisite Type

Corequisite

Requisite

EATM M118

Requisite Description

Course in a sequence

Level of Scrutiny/Justification

Closely related lecture/laboratory course

Requisite Type

Enrollment Limitation

Requisite

1. Criminal background clearance; 2. Current negative TB test or chest x-ray; 3. Drug and alcohol clearance; 4. Fingerprint clearance; 5. No visible tattoos or visible body piercings except single studs in earlobes. Other: 1. Admission to the Moorpark College Registered Veterinary Program; 2. Current tetanus vaccination

Requisite Description

Credit program requisite (credit only)

Level of Scrutiny/Justification

Required by statute or regulation

Student Learning Outcomes (CSLOs)

Upon satisfactory completion of the course, students will be able to:	
1	perform a standard fecal flotation examination of animal feces and analyze the sample for the presence of common internal parasite ova.
2	produce a glass slide blood film and analyze presence of blood cells.
3	perform chemical strip and sedimentation analysis of urine and interpret clinical relevance.
4	utilize s serum biochemical analyzer to perform serum biochemical analysis and then interpret the data.

Course Objectives

Upon satisfactory completion of the course, students will be able to:	
1	identify major external parasites of animals.
2	identify major internal parasites of animals.
3	perform fecal flotation examinations of animal feces and analyze the results.
4	differentiate between the major types of blood cells in companion, zoo, exotic, and large animals.
5	describe the changes that occur in blood cells during disease processes to interpret abnormal hematological findings.
6	demonstrate the proper technique in using equipment to perform common automated tests on blood.
7	recognize the major types of cells and crystals found in urine.
8	interpret urinalysis findings and how they relate to animal health and disease.
9	perform standard serum biochemical analysis of animal specimens.

Course Content**Lecture/Course Content**

n/a

Laboratory or Activity Content

- (7%) Orientation to the veterinary clinical pathology laboratory
- (7%) Microscope use
- (11%) External parasites: fleas and lice
- (11%) Internal parasites: fecal examination
- (6%) Making blood films
- (7%) Blood cell identification
- (11%) Performing a complete blood count
- (5%) Blood coagulation
- (7%) Urine specimen handling
- (5.2%) Urine specific gravity determination
- (3.8%) Urine chemical reagent test strip analysis
- (3.8%) Urine centrifugal and sediment analysis
- (15.2%) Serum biochemistry analysis

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises

Skills demonstrations
Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Clinical demonstration
Group projects
Individual projects
Journals
Laboratory activities
Laboratory reports
Oral analysis/critiques
Oral presentations
Reports/papers
Skills demonstrations
Skill tests
Simulations

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Collaborative group work
Clinical demonstrations
Case studies
Demonstrations
Group discussions
Instructor-guided interpretation and analysis
Instructor-guided use of technology
Laboratory activities
Practica

Describe specific examples of the methods the instructor will use:

Laboratory guidance as students perform laboratory skills commonly practiced in veterinary medicine.
Observations and feedback provided to assist students in the mastery of skills in veterinary pathology.

Representative Course Assignments

Writing Assignments

Write three-page lab reports on laboratory activities performed in class on clinical pathology.
Write lab outlines prior to each laboratory exercise on clinical pathology.

Critical Thinking Assignments

Research, evaluate, critique, and describe the activities performed in lab for the lab reports.
Evaluate case pathology studies typically performed in the veterinary setting and summarize the important parts of these studies.

Reading Assignments

Read textbook reading assignments that coincide with procedures performed in the laboratory.
Read postings on the online learning management system from veterinary journals, publications, and clinic case reports on clinical pathology in animals.

Skills Demonstrations

Demonstrate and evaluate skills from the American Veterinary Medical Association (AVMA) such as:
1. Identify the major blood cells in a given animal blood sample using a microscope
2. Demonstrate the proper technique when performing a chemical strip and sedimentation analysis of urine.

Outside Assignments

Articulation

Comparable Courses within the VCCCD

AG V75 - Veterinary Microbiology, Parasitology, and Laboratory Procedures

Equivalent Courses at other CCCs

College	Course ID	Course Title	Units
L.A. Pierce College	ANML SC 431	Veterinary Clinical Pathology Laboratory	1

District General Education**A. Natural Sciences****B. Social and Behavioral Sciences****C. Humanities****D. Language and Rationality****E. Health and Physical Education/Kinesiology****F. Ethnic Studies/Gender Studies**

Course is CSU transferable

Yes

CSU Baccalaureate List effective term:

FALL 2020

CSU GE-Breadth**Area A: English Language Communication and Critical Thinking****Area B: Scientific Inquiry and Quantitative Reasoning****Area C: Arts and Humanities****Area D: Social Sciences****Area E: Lifelong Learning and Self-Development****CSU Graduation Requirement in U.S. History, Constitution and American Ideals:****IGETC****Area 1: English Communication****Area 2A: Mathematical Concepts & Quantitative Reasoning****Area 3: Arts and Humanities****Area 4: Social and Behavioral Sciences****Area 5: Physical and Biological Sciences****Area 6: Languages Other than English (LOTE)****Textbooks and Lab Manuals****Description**

Sirois, Margi. *Laboratory Procedures for Veterinary Technicians*. 7th ed., Mosby, 2019.

Description

Shapiro, Leland. *Pathology and Parasitology for the Veterinary Technician*. 2nd ed., Cengage, 2009.

Library Resources

Assignments requiring library resources

Laboratory reports on veterinary pathology.

Sufficient Library Resources exist

Yes

Example of Assignments Requiring Library Resources

Utilize the Library's print and online resources to prepare for laboratory exercises and to write lab reports for activities such as serum biochemical analysis of animal specimens.

Primary Minimum Qualification

ANIMAL TRAINING & MANAGEMENT

Additional Minimum Qualifications

Minimum Qualifications

Biological Sciences

Additional local certifications required

RVT or DVM

Review and Approval Dates

Department Chair

12/06/2019

Dean

12/09/2019

Technical Review

01/31/2020

Curriculum Committee

02/04/2020

DTRW-I

02/13/2020

Curriculum Committee

MM/DD/YYYY

Board

03/10/2020

CCCCO

MM/DD/YYYY

DOE/accreditation approval date

MM/DD/YYYY