

EATM M120: ANATOMY AND PHYSIOLOGY OF ANIMALS

Originator

Ishapiro

College

Moorpark College

Attach Support Documentation (as needed)

RVTProgramCourseRequirements.docx

Discipline (CB01A)

EATM - Exotic Animal Training Mgmt

Course Number (CB01B)

M120

Course Title (CB02)

Anatomy and Physiology of Animals

Banner/Short Title

Anatomy and Phys of Animals

Credit Type

Credit

Honors

No

Start Term

Fall 2020

Catalog Course Description

Presents a practical system-by-system approach to the basic structure (anatomy) and function (physiology) of domestic and exotic animals. Combines the study of anatomy and physiology which allows students to effectively integrate the study of structure with functioning of the system.

Additional Catalog Notes

For transfer, the laboratory course (EATM M120L) must be completed concurrently.

Course Credit Limitation: Completion of EATM M120 will meet the subject requirement for EATM M12. However, EATM M12 will not meet the subject requirement for EATM M120. Maximum credit: 3 units if completed both EATM M12 and EATM M120.

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

Will not be required

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

Minimum Contact/In-Class Lecture Hours

52.5

Maximum Contact/In-Class Lecture Hours

52.5

Activity

Laboratory

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****Minimum Outside-of-Class Hours**

105

Maximum Outside-of-Class Hours

105

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

157.5

Total Maximum Student Learning Hours

157.5

Minimum Units (CB07)

3

Maximum Units (CB06)

3

Prerequisites

EATM M101

Corequisites

EATM M120L

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 M101

Requisite Justification**Requisite Type**

Prerequisite

Requisite

EATM M101

Requisite Description

Course in a sequence

Level of Scrutiny/Justification

Required by statute or regulation

Requisite Type

Corequisite

Requisite

EATM M120L

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 | label anatomical drawings of various domestic and exotic skeletons; both bones and joints. |
| 2 | label the four basic animal digestive systems (equine, avian, ruminant and simple stomach). |
| 3 | match common anatomical and physiological terms used in companion, food animals and exotic animal medicine. |

Course Objectives**Upon satisfactory completion of the course, students will be able to:**

- | | |
|----|--|
| 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. |

Course Content

Lecture/Course Content

1. (8%) Anatomy and Physiology:
 - Describe and explain how these concepts relate to small and large animal veterinary medicine
 - Define general anatomical descriptive terms used in veterinary anatomy and physiology
2. (9%) Tissues:
 - Describe the composition of tissues and how they participate in anatomical structure and animal physiology
 - Integumentary system (skin)
3. (13%) Skeletal System:
 - Describe the functions of the skeletal system and the tissues and cells that are involved
 - Explain skeletal microscopic and macroscopic anatomy
 - Describe bone physiology
4. (13%) Muscular System:
 - Describe the functions of the muscular system and the tissues and cells that are involved
 - Explain muscular microscopic and macroscopic anatomy
 - Describe muscle physiology
5. (11%) Cardiovascular System:
 - Describe the functions of the cardiovascular system
 - Describe the anatomy of the heart and its function in the cardiovascular system
 - Explain the major events that occur in vessels
6. (5%) Respiratory System:
 - Describe the major divisions and functions of the respiratory system
 - Describe the anatomy of the lungs and the relationship between the cardiovascular and respiratory systems
 - Explain the major events that occur in lungs
7. (11%) Digestive System:
 - Describe the functions of the digestive system
 - Explain the anatomy and function of the major components of the digestive system
 - Describe the major events in mechanical and chemical digestion
8. (8%) Urinary System:
 - Describe the anatomy and function of the urinary system
 - Explain the function of the nephron and how it contributes to urine formation
 - Explain hormonal influences on urine production
9. (8%) Reproductive System:
 - Describe the anatomy and physiology of the male and female reproductive organs
10. (14%) Nervous System:
 - Describe the anatomy and function of the nervous system -including special senses (eyes, ears, tongue)
 - Explain the different divisions of the nervous system
 - Explain neuron structure and function
 - Describe nerve transmission

Laboratory or Activity Content

n/a

Methods of Evaluation

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

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):

Essay exams
 Group projects
 Individual projects
 Objective exams
 Quizzes

Reports/papers
Research papers

Instructional Methodology

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

Class activities
Class discussions
Case studies
Demonstrations
Group discussions
Guest speakers
Instructor-guided interpretation and analysis
Instructor-guided use of technology
Lecture
Small group activities

Describe specific examples of the methods the instructor will use:

PowerPoint presentations to further illustrate lecture material. Clinical case studies related to anatomy and physiology lecture topics.
Instructor-guided interpretation and analysis of the same.

Representative Course Assignments

Writing Assignments

Write a paper on a specific mammalian species describing anatomical and physiological adaptations for that species.
Write a paper on a specific non-mammalian species describing anatomical and physiological adaptations for that species.

Critical Thinking Assignments

Compare and contrast the digestive system across several species.
Determine the anatomical and physiological adaptations for specific mammalian and non-mammalian species based on environmental changes over time.

Reading Assignments

Read textbook assignments related to the anatomy and physiology for each body system.
Read postings on the online learning management system pertaining to unique and new physiological discoveries related to lecture presentations.

Outside Assignments

Representative Outside Assignments

Complete library assignments researching and comparing various body systems between specific animal species.
Build a plastic model of anatomical structures or create a poster illustrating anatomical adaptations for a specific species.

Articulation

Equivalent Courses at 4 year institutions

University	Course ID	Course Title	Units
Cal Poly SLO	ASCI 229	Anatomy and Physiology of Farm Animals	4

Comparable Courses within the VCCCD

AG V66 - Anatomy and Physiology of Animals

Equivalent Courses at other CCCs

College	Course ID	Course Title	Units
L.A. Pierce College	ANML SC 511	Anatomy and Physiology of Animals	3

District General Education

A. Natural Sciences

A1. Biological Science

Proposed

Date Proposed:

2/4/2020

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 2021

CSU GE-Breadth

Area A: English Language Communication and Critical Thinking

Area B: Scientific Inquiry and Quantitative Reasoning

B2 Life Science

Proposed

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:

UC TCA

UC TCA

Proposed

Date Proposed:

6/1/2020

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 5B: Biological Science

Proposed

Date Proposed:

12/1/2020

Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals

Description

1. Singh, Baljit. *Veterinary Anatomy Coloring Book*. 2nd ed., Saunders, 2015.

Description

2. Colville, Thomas, and Joanna Bassert. *Clinical Anatomy and Physiology for Veterinary Technicians*. 3rd ed., Mosby, 2015.

Library Resources

Assignments requiring library resources

Research on topics concerning anatomy and physiology of domestic and exotic animals.

Sufficient Library Resources exist

Yes

Example of Assignments Requiring Library Resources

Utilize the Library's print and online resources to research topics such as the anatomical and physiological adaptations of mammalian species.

Primary Minimum Qualification

ANIMAL TRAINING & MANAGEMENT

Additional Minimum Qualifications

Minimum Qualifications

Biological Sciences

Additional local certifications required

RVT or DVM or PhD in related field

Review and Approval Dates

Department Chair

12/04/2019

Dean

12/05/2019

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

