

Bergen Community College

VET-215-001

Lecture Outline/Syllabus

Course Title:	Vertebrate Anatomy and Physiology II
Instructor:	Harriet Terodemos (hterodemos@bergen.edu)
Program Affiliation:	Veterinary Technology
Prerequisites:	Vertebrate Anatomy and Physiology I
Course Credits/Hours:	4 Credits/3 Lecture, 3 Lab
Attendance-Lecture:	Mandatory; Absences should be reported immediately
Attendance-Laboratory:	Mandatory; Missing more than (2) lab sessions will result in an automatic failure. <u>Labs cannot be made up.</u>
Tardiness:	Repeated lateness will count as ½ absence and will result in lowering the lecture portion of the final course grade
Class Cancellation:	Prior to EVERY class students are urged to check their email and Moodle

Course Description:

Vertebrate Anatomy and Physiology II is a continuation of Vertebrate Anatomy and Physiology I. It focuses on the basic structures and functions of vertebrate organ systems that primarily emphasize those of mammalian species. Among the topics addressed are the integumentary, cardiovascular, immune/lymphatic, respiratory, gastrointestinal (GI)/digestive, reproductive, urinary/excretory, endocrine, and immune systems. The course also discusses normal homeostatic mechanisms and pathophysiological conditions as well as the interrelationships among organs and organ systems. Dissection is required during laboratory sessions.

Course Materials:

Course Materials

Primary:

Colville and Bassert: Clinical Anatomy and Physiology for Veterinary Technicians, 2nd ed, St Louis, Missouri, 2008, Mosby Elsevier

Colville and Bassert: Clinical Anatomy and Physiology Laboratory
Manual for Veterinary Technicians, St Louis, Missouri, 2009, Mosby
Elsevier

Supplemental:

Additional handouts as indicated by the instructor

Course Description:

A continuation of Vertebrate Anatomy and Physiology I. The endocrine, circulatory, respiratory, renal, reproductive and digestive systems will be studied. Normal homeostatic mechanisms and pathophysiological conditions are emphasized, as well as the interrelationships of organs and organ systems. Dissection is required as part of the laboratory syllabus.

Course Goals:

- To enable the student to locate, identify, and compare the various body tissues and organs of dogs, cats, rabbits, ruminants, horses, birds and reptiles
- To teach the student the ways in which organs and body systems function and interact
- To provide the student with an understanding of the comparative differences in the digestive tracts of various domestic animals
- To provide the student with an understanding of the comparative differences in the respiratory tracts of mammals, birds and fish
- To instruct the student in the features and functions of the male and female reproductive tract
- To introduce the student to the differences between exocrine and endocrine glands, and the functions of each
- To provide the student with an understanding of the comparative differences in the integumentary systems of vertebrates

Performance Objectives:

Upon completion of this course, the student will be able to:

- Identify the glands and organs of the thoracic, abdominal and pelvic cavities of the cat
- List the parts of the cardiovascular system and state their functions
- List the major functions of blood
- Compare and contrast systemic, coronary, and pulmonary circulation
- Identify designated major arteries and veins of the cat
- Explain the cardiac cycle
- Identify the components of a typical ECG tracing
- Compare and contrast the structure and function of arteries and veins
- Explain the process of digestion
- Define: herbivore, carnivore, and omnivore
- Name the parts and their functions of the ruminant stomach
- List the functions of the liver
- Describe and identify the structure and function of lymph vessels, lymph nodes, and lymphatic organs
- Name and state the function of all parts of the respiratory system
- Describe the three basic processes of respiration
- Define: tidal volume, residual volume, dead space, apnea, eupnea, dyspnea
- Explain the anatomy and functions of the excretory system
- Diagram the structures of a nephron and define filtration, reabsorption and secretion
- Explain the three phases of urine production
- Relate the function of the nephron and the formation of urine to the concept of homeostasis
- Explain the anatomy and physiology of the male and female reproductive system
- Explain the estrous cycle
- List the embryonic membranes and state their location and function
- Describe the process of parturition and lactation
- List the endocrine glands; state the hormones they release and their functions
- Describe the structure and function of skin

Teaching Methodologies:

The scheduled topics are covered by a series of lectures combined with laboratory practicals and demonstrations. Models and comparative anatomy skeletons will be utilized, as well as dissection of cat cadavers, for teaching purposes. Additionally, the viewing of videotapes and computerized software programs may be incorporated.

Lecture Testing and Grading Criteria:

Consists of:

- 3 lecture exams
- 1 comprehensive final exam

Exams and Grading:

All tests consist only of objective multiple choice type, matching, and fill-in questions.

50% Lecture

- 3 Lecture Exams @ 8 %
- 1 Final Exam @ 15%
- Zoonotic Disease Presentation @ 5%
- Clinical Applications Presentations (2) @ 6%

50% Lab

Topic Outline:

- Integumentary System: Skin and Related Structures
- Body Fluids
- Cardiovascular System: Physiology of Circulation
- Immune/Lymphatic System/Immunophysiology
- Respiratory System: Respiratory Physiology and the Mechanics of Breathing
- GI/Digestive System: Digestive and Hepatic Physiology
- Urinary/Excretory System: Physiology of the Urinary Tract
- Reproductive System: Male and Female Systems
- Lactational and Neonatal Physiology
- Endocrine System/Endocrinology

Welcome to the online community at BergenCommunity College. You have registered for a Web Enhanced course. This letter provides you with important information and instructions you will need to gain access to Moodle for the online segment of your course.

To access your Moodle course open a browser and go to the portal site <http://my.bergen.edu>. You can find instructions on how to login to the Portal and connect to Moodle via Portal listed on the [Portal Help Site](http://www.bergen.edu/portalhelp/Pages/StudentHelp.aspx) (<http://www.bergen.edu/portalhelp/Pages/StudentHelp.aspx>).

- 1) Your user name is the same as your WebAdvisor username.
- 2) For your initial password, users logging into <http://my.bergen.edu> (the Portal) for the first time will use the first 2 letters of their last name with the first letter capitalized, plus the last 6 digits of your Bergen Community

College Identification number. For example,
 Name = Pat O'Shaunessy BCC ID = 354210 Initial Password =
 Os354210
 Name = Nancy McDouglas BCC ID = 0054532 Initial Password:
 Mc054532

Please note that after logging in, you will be forced to change your password. Your password must be at least 8 characters long. It must contain a number, and an UPPER case letter and a Lower case letter. Your password cannot be any of your previous 6 passwords.

After you login to the portal site, you will find your Moodle course listed under MyClass sites. If you are logging in for the first time, you will be prompted to enter your username and password again. Follow the on-screen instructions to complete onetime setup of your password.

Unless you are on campus, you are responsible for supporting your own Internet access and email account throughout the course.

If you still have difficulty logging in, please call the help desk at **1-877-612-5381**.

Please email us at citl@bergen.edu with suggestions to better serve you and the online learning community at Bergen Community College.

We hope you find your experience to be a productive and enjoyable one!

Anatomy and Physiology II Lecture Syllabus

Week	Colville Chapter(s)	Handouts
	-----Course Overview-----	
1	6: The Integument and Related Structures	
2	8: The Cardiovascular System	
3	8: The Cardiovascular System 9: Blood, Lymph, and Immunity	
4	9: Blood, Lymph, and Immunity	
5	Lecture Exam #1 (Chapters 6,8,9) 10: The Respiratory System	
6	10: The Respiratory System 11: The Digestive System	
7	11: The Digestive System	

8	Lecture Exam #2 (Chapters 10,11) 15: The Urinary System	
9	15: The Urinary System 16: The Reproductive System	
10	16: The Reproductive System	
11	Lecture Exam #3 (Chapters 15,16) 14: The Endocrine System	
12	14: The Endocrine System 17: Avian Anatomy and Physiology	
13	17: Avian Anatomy and Physiology	
14	Comprehensive Final Exam	

BCC Attendance Policy:

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

BIO-115 Lecture attendance policy:

Attendance and classroom participation are of the utmost importance. Students are expected to be present and on time for all classes. If you must miss a class, I expect you will either let me know in advance or contact me immediately after the absence. Whether you are late or absent for a particular class, you are responsible for all materials covered in your absence. This material should be obtained from a class mate. Repeated absences or lateness will result in the lowering of the class participation portion of your grade for this course.

BIO-115 Laboratory Attendance Policy

Attendance is mandatory. Missing more than (2) lab sessions will result in an automatic failure. Labs and Lab Exams cannot be made up.

Americans with Disabilities Act

Students who require accommodations in accordance with the Americans with Disabilities Act can request these services from the Office of Specialized Services. To learn more about how to apply for these services, please visit them at: <http://www.bergen.edu/oss>.

Student and Faculty Support Services

The Distance Learning Office – for any problems you may have accessing your online courses	Room C-334	201-612-5581 psimms@bergen.edu
Smarthinking Tutorial Service	On Line at:	www.bergen.edu/library/learning/tutor/smart/index.asp
The Tutoring Center	Room L-125	201-447-7908
The Writing Center	Room L-125	201-447-7908
The Online Writing Lab (OWL)	On Line at:	www.bergen.edu/owl
The Office of Specialized Services (for Students with Disabilities)	Room -131	201-612-5270 http://www.bergen.edu/pages/5175.asp
The Sidney Silverman Library – Reference Desk	Room L-226	201-447-7436

Important College Policies
Found within the College Policy Manual at
<http://www.bergen.edu/Documents/Catalog/2012-2013/2012-13%20Catalog-Policies.pdf>

Withdrawal from Classes and Refunds, pp. 44-46.

Grading, pp. 53-55.

Course Grade Appeal Policy, p. 54.

Academic Integrity and Plagiarism, pp. 60-62. **Read this carefully.**

Class Attendance Policy, pp. 63-64.

Acceptable Use of Information Technology Resources, pp. 64-65.

Clubs, pp. 68-74.

Code of Student Conduct or Standards of Conduct, pp. 86-92.

Alcohol and Drug Policy, pp. 78-79.

Family Education Rights and Privacy Act of 1974, p. 79.

ADA and Grievance Procedures p. 107

Sexual Harassment Policy, pp. 79-83.

Campus Assault Victim's Bill of Rights, pp. 82-83.

Smoking Policy, pp. 83-84.

Traffic Regulations, p. 77.