



**Professional Education Unit
MOREHEAD STATE UNIVERSITY
PROFESSIONAL EDUCATION UNIT
COLLEGE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF BIOLOGY AND CHEMISTRY
BIOLOGY 210 – General Zoology
DELIVERY METHOD – TRADITIONAL CLASSROOM and LABORATORY
COURSE SYLLABUS – Spring 2012**

COURSE: BIOL 210. General Zoology (2-4-4) I, II.

TIME AND PLACE: Lect. 9:10-10:10 TTh in Lappin 311; Lab in LA 311, 1:50-4:00 MW or 12:40-3:50 TTh

LECTURE PROFESSOR: David J. Eisenhour
OFFICE: 301F Lappin Hall
PHONE: 783-2963
EMAIL: d.eisenhour@morehead-st.edu
OFFICE HOURS: 10:20-11:20 MW; 1:50-2:50 TTh

COURSE DESCRIPTION: A survey of animals from Protozoa to Mammalia with emphasis on phylogeny, evolution, comparative morphology, and physiology. *Prerequisite: BIOL 171.*

Required Field Experience Hours: [0]

“Community Engagement: A Light to and from the Mountains”

The Professional Education Unit at Morehead State University delivers rigorous, high quality programs that prepare professionals informed by best national and international scholarship, plus research, literature, and experiences specific to Appalachia- preparing professionals to improve the schools, quality of life, and the communities in which they live and serve. This statement is not only the strategic mission for the College, but it also incorporates the conceptual framework that guides all our activities.

Conceptual Framework Outcomes (CFO's):

The Unit and the faculty within individual programs assess the degree to which its graduates:

- 1) Master the content knowledge, professional and the twenty – first century skills need to make an optimal contribution to “whole” student learning in education settings.
- 2) Are competent in the collection and use of data to inform decision – making and to demonstrate accountability for student learning.
- 3) Demonstrate professional dispositions

4) Are culturally competent and understand the regions from which they have come utilizing knowledge and experiences to effectively “bridge the gaps” (economic, achievement, and geographic) ensuring optimal learning for all students.

5) Engage in authentic field experiences in collaboration with committed school – based partners and are empowered to improve the quality of education throughout this region and beyond.

Student Learning Outcomes (SLOs)- Students will be expected to:

1. use thinking, writing and math skills to evaluate and interpret information, solve and manage problems related to zoological information (including aspects of phylogeny, evolution, ecology, physiology, functional anatomy, physiology, and behavior);
2. understand how zoologists discover and communicate scientific information, including use of experimental method and comparative method to address hypotheses;
3. recognize common and scientific names of animals important to humans;
4. describe the relationship of major animal groups and identify how phylogenetic systematics serves as a tool to discover these relationships
5. identify anatomical, physiological, ecological, and behavioral features of major animal groups and explain how these have contributed to limited the “success” of these animal groups
6. for representative organisms, identify selected anatomical structures and understand their functions

NCATE/ EPSB Accreditation Alignment of CFO’s and SLO’s:

Program: [Biology - teaching]		[General Zoology – BIOL 210]			
Aligned with→ Assessment↘ (point values)	Kentucky Teacher Standards (KTS)	Kentucky Department of Education Core Content for Assessment (KDECCA)	Education Professional Standards Board (EPSB)	National Science Teachers Association (NSTA)	National Science Teacher Association – Teacher Content Knowledge
Lecture exams (500) CFO:1, 2 SLO: 1, 2, 3, 4, 5, 6	1	SCHUDU6, S9, U1, S2 SCHBCU2, S1, U3, S3, U5, S6, S7	Literacy	1	A2, 3, 4, 6, 7, 8; B2, 5
Lecture quizzes (100) CFO: 1, 2 SLO: 1, 2, 3, 4, 5, 6	1	SCHUDU6, S9, U1, S2 SCHBCU2, S1, U3, S3, U5, S6, S7	Literacy	1	A2, 3, 4, 6, 7, 8; B2, 5
Lab Exams (600) CFO: 1, 2 SLO: 3, 6	1	SCHUDU6, S9, U1, S2 SCHBCU2, S1, U3, S3, U5, S6, S7	Literacy	1	A2, 3, 4, 6, 7, 8; B2, 5

Lab Quizzes (200) CFO: 1, 2 SLO: 3, 6	1	SCHUDU6, S9, U1, S2 SCHBCU2, S1, U3, S3, U5, S6, S7	Literacy	1	A2, 3, 4, 6, 7, 8; B2, 5
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Assignment Descriptions:

Program: BIOLOGY – SECONDARY TEACHING General Zoology (BIOL 234)	
Assessment (point value)	Description
Lecture exams (500)	Exams will assess content knowledge and conceptual understanding of the course material from lecture. Exams will be given during scheduled class time.
Lecture quizzes (100)	Lecture quizzes will assess content knowledge and conceptual understanding of the course material from lecture. Quizzes will be given during scheduled class time.
Lab exams (600)	Exams will assess content knowledge and conceptual understanding of the course material from lab. Exams will be given during scheduled class time.
Lab quizzes (200)	Exams will assess content knowledge and conceptual understanding of the course material from lab. Exams will be given during scheduled class time.

Grading scale: Grades will be assigned on a % basis of 650 points.

		<u>Grading Scale</u>
Lecture Exam I	100pts	A = 90-100%
LectureExam II	100pts	B = 80-89.9%
Lecture Exam III	100pts	C = 70-79.9%
Comprehensive Final Lecture Exam	200 pts	D=60-69.9%
Lecture quizzes (10@10 pts each)	100 pts	E =0-59.9%
Lab Exam I	150 pts	
Lab Exam II	150 pts	
Lab Exam III	150 pts	
Lab Exam IV	150 pts	
<u>Lab Quizzes (10 @20 pts each)</u>	<u>200pts</u>	
	1400pts	

The final exam will be given Monday, 7 May 2012, 10:15.

Written work on exams and quizzes will include assessment of critical thinking/problem-solving skills. Students must be prepared to address a question, using appropriate scientific vocabulary and explanations which focus on the “how” and “why” components which are relative to the question.

Required texts:

1. Hickman, C. P., Jr., L. S. Roberts, S. Keen, D. J. Eisenhour, A. Larson, and H. I’Anson. 2011. *Integrated Principles of Zoology, 15th edition*. McGraw-Hill. ISBN 13-978-0-07-304050-9.

2. Hickman, C. P., Jr., L. B. Kats, and S. L. Keen. 2011. *Laboratory Studies in Integrated Principles of Zoology, 15th edition*. McGraw-Hill. ISBN 13-978-0-07-304051-6

3. Eisenhour, D. J., and S. O’Keefe. 2011. *Laboratory Syllabus, Revised Edition, BIOL 210, Morehead State University*.

Course Evaluation:

Lecture exams and quizzes will be assessed by multiple choice, matching, diagraming, and short answer questions. Written work on exams and quizzes will include assessment of critical thinking/problem-solving skills. Students must be prepared to address a question, using appropriate scientific vocabulary and explanations which focus on the “how” and “why” components which are relative to the question.

Lab exams and quizzes will be assessed by mostly short answer questions (some matching or multiple choice on quizzes). Both will primarily use a “practical” style, in which students will have to examine material (e.g., dissected or undissected specimens or specimens on microscope slides) to answer questions.

Attendance: Because classes are scheduled it is evident that attendance is important. Students are expected to attend all scheduled meetings of the class, on time. Attendance will not be taken (and thus not graded), but missed classes will almost certainly result in lower performance on quizzes and exams. To make-up a missed exam or quiz, a student must notify the professor within 24 hours (before the absence if possible) of the absence with a University-approved excuse to be eligible for any options (determined by the professor) available to the student in regard to make-up. The attendance policy and what is considered an acceptable University-approved excuse is found on the Morehead State University document:

<http://www2.moreheadstate.edu/files/units/daa/uar/UAR%20131.02%20Excused%20Absence.pdf?n=9731>

Classroom protocol:

Academic dishonesty may result in failure of the class. Note the section in the syllabus on academic dishonesty.

Cell Phones (including Blackberry’s and I phones), Walkie Talkie’s, PDA’s, and Beepers must be shut off upon entering the classroom. MP3 Players, iPOD’s or any other device requiring the use of headphones are not permitted during class. If these “go off” during class, the student may be asked to leave. If these are out during a test or quiz, it will be considered academic dishonesty and the student will be given a “zero” for that day.

If a student leaves class early (e.g., after a quiz) the student will be give an “zero” for the most recent quiz.

Laptops and Tape recorders are permitted. It is a safety issue to have power cords running across the floor (it is your responsibility to have a fully charged battery). If you are discovered doing anything other than course related material on your laptop during class you may be asked to leave the class immediately and you will lose your privilege to bring your laptop to class.

Academic Dishonesty

Academic dishonesty will result in a “zero” for the assessment, failure of the class, or expulsion from the university. Cheating, fabrication, plagiarism or helping others to commit these acts will not be tolerated. Academic dishonesty will result in severe disciplinary action (identified above) and notification of the Dean of Students. If you are not sure what constitutes academic dishonesty, read the Eagle: Student Handbook or ask your instructor. An example of plagiarism is copying information from the internet when appropriate credit is not given. The MSU policy is located at <http://morehead-st.edu/units/studentlife/handbook/academicdishonesty.html>

e-mail: ONLY MSU e-mail is to be used for **all e-mail communications** between student and professor.

Use of Technology: Students will be expected to use the internet, MSU e-mail, word processing, and any other appropriate technology (including Blackboard) needed to complete assignments. Blackboard and MSU email will be used to dispense course materials to students.

Disability Statement: Any student with a validated accommodation for a validated disability should make an appointment to see me as soon as possible.

Americans with Disabilities Act (ADA)

In compliance with the ADA, all students with a documented disability are entitled to reasonable accommodations and services to support their academic success and safety. Though a request for services may be made at any time, services are best applied when they are requested at or before the start of the semester. To receive accommodations and services the student should immediately contact the **Disability Services Coordinator in Room 204E in the Student Activities Suite of the Adron Doran University Center**, 606-783-5188, www.moreheadstate.edu/acs/

Policy for Accommodating Students with Disabilities: Professional staff from MSU Academic Services Center (ASC) coordinates efforts to address accessibility needs and class accommodations with instructors of students who have learning or physical disabilities. Faculty will cooperate with the ASC staff to accommodate the needs of students taking departmental courses.

Campus Safety Statement:

Emergency response information will be discussed in class. Students should familiarize themselves with the nearest exit routes in the event evacuation becomes necessary. You should notify your instructor at the beginning of the semester if you have special needs or will require assistance during an emergency evacuation. Students should familiarize themselves with emergency response protocols at www.moreheadstate.edu/emergency.

Course Calendar: BIOL 234 (Human Anatomy & Physiology I)

Spring 2012 Tentative Daily Schedule

Course Content:

NOTE: Any changes in the syllabus will be announced by the professor.

Period	Topic(s)	Chapter
17 Jan	Introduction to zoology	1
19 Jan	Evolution in a nutshell	6
24 Jan	Principles of systematics and taxonomy: how are animals named?	10
26 Jan	Protists: bodyplan, flagellates, and sporozoans	11
31 Jan	Protists: ciliates and amebas`	11
2 Feb	Sponges and origin of multicellular animals	12
7 Feb	Jellyfishes and comb jellies: life as a wheel	13
9 Feb	Exam I	
14 Feb	Flatworms and ribbonworms: bilateral symmetry and heads	14
16 Feb	Nematodes and horsehair worms: why have a body cavity?	18
21 Feb	Annelids: importance of segmentation	17
23 Feb	Annelid diversity and small lophotrochozoan phyla	17, 15
28 Feb	Molluscs: chitons, scaphopods, and bivalves	16
1 Mar	Molluscs: gastropods and those amazing cephalopods!	16
6 Mar	Exam II	
8 Mar	Arthropods: origins, allied phyla, chelicerates, and myriapods	18, 19
13 Mar	Arthropods: crustaceans and ecdysis	20
15 Mar	Arthropods: insects, metamorphosis, and how to get rid of ammonia	21
27 Mar	Echinoderms and hemichordates: back to the wheel again	22
29 Mar	Chordate origins, sea squirts, and amphioxus: song-inspiring	23
3 Apr	Fishes: origin and diversity	24
5 Apr	Fishes: adaptations for living an aquatic life	24
10 Apr	Origin of tetrapods and living amphibian diversity	25
12 Apr	Exam II	
17 Apr	Origin and adaptations of amniotes: a new method of reproduction	26
19 Apr	Turtles and squamates: importance of thermoregulation	26

24 Apr	Tuataras, crocodilians, and dinosaurs: be nice to the Earth	26
26 Apr	Birds: flight is amazing and sperm are cheap	27
1 May	Mammals: origin and diversity	28
3 May	Mammals: adaptation and primate evolution. The zoo in you.	28
7 May	Final Exam (10:15)	