BIO3461 - WILDLIFE BIOLOGY
Spring 2016

Instructor: Dr. Monte L. Thies
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Lecture: 9:30 – 10:50 TTh in LDB115
Lab: 2:00 - 3:50 Th in LDB115 and as arranged
Office hours: 11:00 - 12:00 TTh and by appointment

CATALOG DESCRIPTION: The history and basic principles, philosophy and concepts of wildlife management as they relate to habitats, people, and the problems associated with their interactions. Two-hour laboratory and fieldwork. Prerequisites: Minimum grade of C in Botany and Zoology, and Ecology.

COURSE OBJECTIVES: Upon completion of this course, students should:

- Understand the history of fish and wildlife management and the current professional opportunities, responsibilities, and societies in this specialization in forest resources.
- Explain some of the fundamental ecological concepts that form the basis of biologically sound management of fish and wildlife, as renewable natural resources.
- Explain some of the basic principles, concepts, procedures, and techniques used in managing fish and wildlife populations.
- Explain the fundamentals of managing terrestrial and aquatic habitats for production of fish and wildlife resources (consumptive and non-consumptive; game and nongame).
- Understand the importance of people, public relations, and public policy in the conservation and management of fish and wildlife populations and habitats.

LECTURE TEXT: Bolen, E. G. and W. L. Robinson. 2003. Wildlife Ecology and Management. 5th ed. Prentice-Hall.

LABORATORY TEXTS: Access to a series of field guides will be strongly encouraged as references for completion of the laboratory and to support the lecture. The following are suggested but there are alternatives that you may prefer – just make sure that the books you choose are complete and suit your needs.

Mammals:
(*Required*) Thies, M. L. 2016. A Key to The Skulls of North American Mammals, 4th ed. KendallHunt, Dubuque, IA
Reid, F. 2006. The Peterson Field Guide to Mammals of North America, 4th ed. Houghton Mifflin Harcourt, Boston.
Birds: Robbins, C. S., B. Bruun, and H. S. Zim. A guide to field identification: Birds of North America. Golden Press, NY.
Plants: Miller, J. H., and K. V. Miller. 2005. Forest plants of the Southeast and their wildlife uses. University of Georgia Press, Athens, GA.

General: Bookhout, T. A., ed. 1994. Research and management techniques or wildlife and habitats. The Wildlife Society, Bethesda, MD.

Fish: Page, L. W., and B. M. Burr. The Peterson Field Guide Series No. 42: Freshwater fishes. Houghton Mifflin Co., Boston.

Herps: Conant, R., and J. T. Collins. The Peterson Field Guide Series No. 12: Reptiles and amphibians: Eastern/Central North America. Houghton Mifflin Co., Boston.

FIELD CLOTHES: As a result of the practical nature of this class, a number of labs will include field trips or other outdoor activities. Therefore, you should wear proper field clothes to each lab (i.e. no shorts, tennis shoes, etc.). You should also be prepared to go the field in inclement weather including, but not limited to, excessive heat or cold, rain, or wind. If you are not prepared to go to the field, be prepared to lose credit for that day's activities and assignments.

ATTENDANCE: It is imperative that you attend every class and lab. If you must miss scheduled class or lab time submit an acceptable excuse in writing prior to the class meeting. It is your responsibility to make up all missed material due to excused absences.

MAKE-UP POLICY: NO MAKE-UPS WILL BE GIVEN TO UNEXCUSED ABSENCES. Missed lab exams may NOT be made-up under any circumstances. If a lab exam is missed because of an excused absence, the test will not be considered in calculating the final average. If a lecture test is missed for an excused reason, arrangements can be made to make up the exam; however, if missed for unexcused absences, a grade of 0 will be recorded, and this will be used in calculating the final average. **Absence from any exam MUST be approved PRIOR to the exam being administered.**

GRADING AND EXAMINATIONS

Grading System

Exam I	100
Exam II	100
Final Exam	150
Lab Exam I: Mammals Skins and skulls	75
Lab Exam II: Mammals Photographs, etc.	50
Lab Exam III: Birds	75
Lab Exam IV: Plants	50
Expanded Abstracts	60
Written Assignments	90
Species Account	150
Oral Species Report	100
Total	**1000**

Grading Scale

900-1000	**A**
800-899	**B**
700-799	**C**
600-699	**D**
Below 600	**F**

LECTURE EXAMS: Lecture exams will cover materials discussed in class along with any information presented during field components of the class. Information about a particular wildlife species, habitat requirements, management practice, and/or plant species that we discuss in class or on field trips also may be asked.

FINAL EXAM: THURSDAY, MAY 5, 9:30-11:30

LAB EXAMS: Lab exams will cover those plants and animals either discussed in class or identified in the field. Both common and scientific names, including general taxonomy, will be required. Mounted specimens of most plants and animals will be available in the lab; however, some specimens may be represented only with pictures, tracks, and/or vocalizations. Questions about a species' wildlife value as discussed in class or in the field may be included.

EXPANDED ABSTRACTS (60 points)

You are to choose four papers dealing with wildlife management from refereed journals and write an expanded abstract for each of them. The abstract should have an introduction, method and materials, study area, results, discussion, conclusion, and your critique of the paper. The maximum length for the expanded abstract is three typed pages of 12pt font. The format for the abstracts should follow that of the **Journal of Wildlife Management**.

Abstract 1 - subject single species - **Due March 3**
Abstract 2 - subject multiple species - **Due March 24**
Abstract 3 - subject habitat management - **Due April 7**
Abstract 4 - subject your choice - **Due April 21**

SPECIES ACCOUNT AND ORAL PRESENTATION (250 points)

The **species account is due at start of lecture April 28th (150 points)**. A written proposal for the species account must be selected and approved by **February 16th**. Species accounts should be at least 10 but not exceed 15 double spaced pages of 12-point font and **follow the general style of a *Mammalian Species Account* unless otherwise agreed upon by the instructor. Do NOT format your paper in two columns.**

Your **oral presentation (100 points)** will be used to tell the class what you have done for your species account and should be between 12-15 minutes in length. Depending on the number of students in the course, these PowerPoint presentations will be given during the last two class periods and lab period. Grades will be based on a combination of peer evaluations of the presentation, quality of presentation, and thoroughness of topic coverage. An electronic copy of your presentation must be turned in on the day of your class presentation or 25 points will be deducted from the presentation grade.

PLEASE ALLOW SUFFICIENT TIME FOR THESE PROJECTS.

Class participation, preparation, and enthusiasm (or lack of) may be used to adjust borderline grades up or down to the next appropriate letter grade. Class attendance is optional, but participation is difficult if you are not there!

WRITING ASSIGNMENTS

Periodic short writing assignments will be assigned periodically based on lecture and lab presentations and discussions. You will be given more information about these assignments in class as appropriate.

ALL ASSIGNMENTS ARE TO BE HANDED IN BY THE START OF CLASS TIME (9:30AM) ON THE DAY THEY ARE DUE. A 10% PENALTY (ONE LETTER GRADE) WILL BE ASSESSED PER DAY FOR ALL LATE ASSIGNMENTS.

ACADEMIC HONESTY AND PLAGIARISM: All academic work must meet the standards contained in the University's academic honesty policy. All students are responsible for informing themselves about those standards before performing any academic work. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense.

If you do not understand any of the material presented in this class, ask about it! Without feedback from you, I have no way of knowing whether you understand something - until an exam. Although this course will be demanding, let's make sure that both you and I enjoy it!

GENERAL LECTURE TOPICS

I. Course Introduction and Syllabus
II. Historical Concepts
    A. Wildlife exploitation, conservation, and legislation
III. Fish and Wildlife Professions
    A. Professional societies
    B. Fish and wildlife agencies
IV. Habitat Concepts and Management
    A. Habitat features, community diversity, and succession
    B. Aquatic habitats and ecological concepts
    C. Wildlife habitat management techniques and objectives
    D. Fisheries habitat management objectives
    E. Environmental impact assessment
V. Population Concepts
    A. Population characteristics and growth
    B. Carrying capacity and population regulation
    C. Population evaluation
VI. Managing Wildlife Populations
    A. Game management concepts
    B. Human dimensions, hunting, anti-hunting, and animal welfare/rights
    C. Nongame and endangered species
    D. Predator reintroductions
    E. Consumptive and non-consumptive values
VII. Nongame and endangered species
IX. Invasive species

TENTATIVE LAB COMPONENTS

Research Problem and Writing Style
Species, Sex and Age Determination in Waterfowl and Upland Game Birds
Species, Sex and Age Determination for Mammals
Game fish, Amphibians & Reptiles
Statistical Analyses
Applied Trapping; Trapping Methods Demonstration
Vegetation Identification and Analyses

NOTE: THE ABOVE SCHEDULE IS SUBJECT TO CHANGE.