BIOSC 1420 – WILDLIFE MANAGEMENT

Pymatuning Laboratory of Ecology Summer 2013 – Syllabus

INSTRUCTOR: Dr. Morty Ortega, University of Connecticut E-mail: plemorty@gmail.com

DESCRIPTION:

This is a basic pre-professional course for majors in natural resources, ecology, biology, and related fields. The course fulfills certification requirements of The Wildlife Society and is recommended for students planning graduate study or employment in natural resources management. Some academic background in ecology is expected. A brief review of wildlife conservation will be followed by a review of ecological principles including population ecology. Application of these principles in management of wetlands, farmlands, rangelands and forestlands for wildlife precedes more specialized aspects such as exotic, urban, nongame and endangered wildlife programs. The course is field oriented, but has a heavy writing component, thus, be prepared for the field activities, to get into literature review literature, and to write a management plan.

PURPOSE:

This course is intended to provide students the how ecological principles are considered in the management practices of modern wildlife conservation.

OBJECTIVES:

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

- 1. Identify and describe the basic components of wildlife management programs;
- 2. Understand and apply ecological principles in wildlife program development for major ecosystems habitats and animal groups;
- 3. Characterize the role of individual citizens and professionals in wildlife conservation programs.

SUGGESTED TEXTS:

McComb, B. 2008. Wildlife Habitat Management, Concepts and Applications in Forestry. CRC Press. 319 pp.

Sinclair, A.R.E., J. M. Fryxell. And G. Caughley. 2006. Wildlife Ecology, Conservation, and Management. Second Edition. Blackwell Publishing. 469 pp.

Bolen, E.G. and W. Robinson. 2002. Wildlife Ecology and Management (5th Edition). Benjamin Cummings. 634 pp.

We will also discuss the use of scientific literature and Internet sources.

ATTENDANCE: Expected. Please notify the instructor in advanced if absences are anticipated.

FORMAT: Lectures and discussions are based on key elements of assigned readings and supplemental sources. Occasional films, slides and guest speakers may be used as appropriate.

GRADING:

Wildlife Management Paper	70
Wildlife Management Paper peer-review (15 points per reviewer)	30
Presentation of Objectives of Wildlife Management Plan	50
Presentation of Wildlife Management Plan	150
Peer evaluation of plan	50
Wildlife Management Plan	250
TOTAL	600

Letter grades

$\begin{vmatrix} 600 - 570 = A \end{vmatrix}$ $\begin{vmatrix} 539 - 520 = B + \end{vmatrix}$ $\begin{vmatrix} 479 - 460 = C + \end{vmatrix}$ $\begin{vmatrix} 419 - 400 = D + \end{vmatrix}$

569 – 540 = A-	519 - 500 = B	459 - 440 = C	399 – 380 = D
	499 – 480 = B-	439 – 420 = C-	379 – 360 = D-

Less than 360 = F

WILDLIFE MANAGEMENT PAPER

Students will complete a literature search to write a three-page report, either about a wildlife system. This report will characterize the species involved, the habitat/ecosystem, and human components of the system, with special emphasis on the management aspect of the species. The scientific literature search will identify a minimum of 10 primary literature journal articles that will be appropriate for describing the chosen wildlife system. Lecture time will be devoted to how to search for and summarize the scientific journal articles identified and the particular format of the report with tips on scientific writing style and referencing conventions. Please follow the format used by the **Journal of Wildlife Management**. Part of the grade is based on the peer-review done in class.

WILDLIFE MANAGEMENT PLAN

Students will to work on groups of 2-3 on a wildlife management plan.

- The outline, including goal and objectives, is due Monday of the second week, and will be presented to the class (see Presentations below)
- The first draft of the management plan is due by the end of the second week. This draft is going to be reviewed by your peers in the class.
- The due-date for the final report is the last day of the session. Please follow the format used by the **Journal of Wildlife Management** in relation to style. Put special attention the way that you cite literature in the text and also how you format the literature in the "Literature Cited" section. Use metric system.

Presentations

Each team will do two presentations.

First presentation: Monday of the second week. Objective: to present goal and objectives of the management plan, including general information about the site that is going to be managed. This should be a 15-20 minute presentation.

Second presentation: A presentation of the final wildlife management plan will be done on the last Friday of the session. In this presentation the group will let the rest of the students know what your project was all about, and convince them that the plan will do the proper job to manage the property. Time is unlimited, but should not be shorter than 30 minutes!

Final Report

Format for the report should include

- 1. Introduction
 - a. Why the project is being done? Owner of the property and any general information of the site
 - b. Goal and Objectives

2. Study Site

This section should contain as much detail as possible on the site. The section should be written in a narrative form, however you should include lists in the Appendices. Make sure to talk about the methods on how inventories of flora, fauna, and other property features should be done.

3. Management Recommendations

This is the heart and soul of the project. Perhaps it should be the longest part of your paper. In here you should include feasible alternatives for the management of the property. Make sure that you are answering your goal and objectives in this part of the plan.

5. Appendices: include all your Tables and Figures in the first Appendix, the following Appendices should contain:

Maps, Photos, Lists of flora and fauna (include common and scientific names), Any additional information

CALENDAR OF ACTIVITIES - WILDLIFE MANAGEMENT - BIOSC 1420 - SUMMER 2012

Day	Topics	Due
1	Introduction, Syllabus, History, Game management vs	
	wildlife management, Habitat management, Animal	
	populations, wildlife management paper assignment	
2	Habitat/Wildlife interaction; Counting animals, Age	
	Structure, Carrying capacity calculations	
3	Wildlife Management Plan	
4	Mortality – diseases, hunting – field work	
5	Field work – presentations about management plan	Wildlife management
		paper due for peer-review
6	Field work, Wildlife Nutrition, Outline of Management plan	Presentation Outline of
		management plan
7	Field work, Animal Behavior and Management, habitat	
	restoration, endangered species	
8	Field work, Controlling wildlife	Wildlife management
		paper final
9	Field work, book discussion, chapter 13	
10	Field work, book discussion, chapters 17 and 20	First draft of management
		plan
11	Field work, Wildlife habitat tools and techniques	
12	Field work, Wildlife habitat tools and techniques	
13	First draft of project, Peer review, Field work	
14	Field work	
15	Management plan, final presentations	Final presentation
		Final draft due

The Fine Print: This schedule is not written on stone... thus changes may (and will) occur!