BIOLOGY 344 POLICIES – 2008

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Course Objectives: The purpose of this course is to provide biology majors and other interested students with a knowledge of basic principles of applied wildlife management and research, with emphasis on the development of critical thinking skills through class discussion of current issues. The course helps satisfy the biology elective requirement for biology majors and also the liberal arts elective requirement for non-science majors. Since this is a double-numbered course that can be taken for graduate credit, you must be a junior or senior to take the class, if a graduate student is enrolled. Although a wide variety of topics are covered, the course emphasizes private lands management, grassland bird management, deer management, wetlands management, and ecotourism.

Important information for those contemplating a career with the U.S. Fish and Wildlife Service: Biology 344 counts towards the 9 semester credits of "wildlife" courses necessary for employment as a wildlife biologist with the USFWS. My ornithology course, Biology 444, also counts towards the "wildlife" requirement (3 credits), so you might want to consider taking this course this spring semester. Biology 444 emphasizes bird identification and management. See the Study Guide for more information on UWFWS requirements for various federal positions.

Attendance: Students are **REQUIRED** to attend ALL class meetings, which begin **PROMPTLY** at 8:00 on Monday, Tuesday, Wednesday, and Friday. You must sign in each day on a the list taped to the whiteboard in 425 AGS. If you must miss class, please inform me of the reason. If the reason is of a personal nature and you would prefer not to discuss it, simply say "for personal reasons I had to miss class", and I will not charge you with an unexcused absence. However, you will not be able to turn in assignments via D2L after the period that they are due - see below. More than three unexcused absences will result in a lowering of your grade by category (see university grading policy below).

Class discussion: I intend to generate discussions in class as much as possible, usually at the beginning of lecture periods. These discussions involve a critique of articles on wildlife biology from newspapers, magazines, and scientific journals (many of which are in your Study Guide). **Each student will be required to turn in at least four such articles during the term. Two of the four articles should be from scientific journals such as the Journal of Wildlife Management; the remaining two can be from any source, including Internet sources.** Try to find articles on controversial topics to make class discussion as interesting as possible. See the Study Guide for an annotated list of periodicals available at the university library which can be used as sources of articles for class discussion.

During selected lecture periods one or more of the above articles will be passed out to the class. You are expected to critically read these articles and be ready to discuss them the following lecture period. To make sure that this happens, **you will write a paragraph summarizing each article in your own words, along with one question or comment relating to the discussion article prior to the period in which the article is discussed.** The paragraph will be placed in the "dropbox" of D2L, whereas the question will be posted in the discussion forum so that others can read. The question can relate to anything about the article that strikes you as interesting or questionable. Other students will not be able to read your article summary, but everyone will be able to read your question. **You will get credit for responding to other students comments prior to the actual class discussion.**

You do not have to say things of earthshaking significance to receive credit for class discussion. If you prefer to play the "devil's advocate" on a controversial issue, feel free to do so. Some students try to catch up on discussion points by asking questions during class presentation at the end of the term; you will only get half as much credit for asking them as for questions asked or points raised during regular class periods. **You will get full credit for questions asked of guest speakers during the term, however**.

Keep in mind that you are <u>required</u> to contribute to turn in discussion questions and participate in class discussion, in the same way that you would be required to make speeches in a public speaking class. If you don't talk in class, it would be the same as refusing to give a speech in speech class - with a corresponding effect on your grade. If the prospect of doing this bothers you, you may be happier taking a different class. My rationale for doing this is that good oral communication skills are absolutely critical for successful natural resource managers, as will be evident during talks by guest speakers throughout the term.

Calculation of points earned during class discussion is as follows: Total number of 'authored' comments from D2L will be added to the number of in-class comments (recorded on my seating chart) and D2L dropbox submissions. Additional points will be added to this total, providing that you turn in all four articles (see first paragraph under 'Class discussion' above). In the past this worked out to a maximum point total of 70 points, which was then multiplied by 50/70 to convert it to points earned out of 50 for class discussion. This year may be somewhat different, depending on the number of articles discussed, but class discussion will still be worth 50 out of the 270 points possible (see 'Tentative breakdown' below).

<u>Examinations</u>: Two lecture examinations and two identification quizzes will be given (see point breakdown). These exams will stress important principles covered during lecture and class discussion, so you will need to review both lecture notes and notes taken during class discussion to do well on them. The ID quizzes will include life history information on Wisconsin plants and animals (mainly mammals but some herps and insects). The purpose of the quizzes is twofold: to assist with your management plan, and so you will do well on interviews with the Wisconsin DNR (lack of knowledge of basic life history info on Wisconsin flora and fauna has hurt some students in the past when it comes to job interviews). These quizzes will be given in class, but the information you need to know will be found online, linked to the wildlife home page.

<u>Laboratory</u>: The major requirement of the lab is to devise a management plan for an area of your own choosing (such as property owned by yourself, your family, or a friend). This management plan will have a holistic focus, but will focus on one or possibly two 'target (keystone) species. Real managers rarely work independently of others, so students will work in pairs, each of which will constitute a "management team". The number of teams working with a particular species or ecological group will be limited, so you will need to select your partner and target species early to ensure that you work with your species of choice.

It is strongly recommended that you begin work on this project as early in the term as possible to avoid the "last-minute rush" at the end of the semester that results in a poor report (and grade). An oral (team) presentation of your plan will be due towards the end of the semester (see syllabus), at which time the web page must also be posted for grading.

The written portion of the plan must be submitted as a World Wide Web page, linked to your personal home page. Techniques for web page construction will be learned during laboratory sessions at

the Gray Lab in the lower level of the Library. The written portion of the plan must be submitted as a web page, including all figures and maps, but for the actual presentation Powerpoint is recommended, or a combination of Powerpoint and the web. The Powerpoint presentation must be linked to your your web page Although the management plan is the major component of your lab grade, other topics will be covered as well as indicated on the syllabus.

Management plan grading: One hundred points toward your grade will be based on the quality of your management plan web page and oral presentation. It is required that all members of the team contribute equally to both the written and oral portion of the management plan. You will both work on all aspects of the plan in a co-operative fashion; a major reason for this assignment is to force you to work closely with another person (as frequently occurs in the real world). I do not want to hear about personality conflicts or for you to come to me with trivial complaints about your partner; these problems are for you to work out in an adult fashion. However, if you find yourself in a very bad situation concerning your partner and are concerned that it will affect your grade, feel free to contact me so that we can work the problem out.

Important points concerning management plan

There are separate instructions for the management plan, but some points bear repeating here :

1. **The 'Literature review' section of the management plan is an important component of the grade**. Note that a minumum of 20 references is required for this section, which must be a substantial part of the final written portion of the plan (published as a web page).

2. **The 'Ecotourism' section of the management plan must include maps and other information relating to the efforts of towns to support their business communities** (e.g. 'River Falls Days', local festivals). It should include phenology charts, as well as networking and marketing components (as illustrated by the 'Grackle Junction' exercise).

3. **Plant and animal inventories must be part of your management plan**. I don't expect you to identify every single species of plant and animal currently present on your property, but the major species and their distributions should be clearly indicated as part of your maps and written materials.

4. The concept of '**effective habitat size**' (that is, the suitability of surrounding land for your target species) must be addressed in the management plan.

5. **All information in your plan must be properly cited**. See the separate instructions (on the web and in your Study Guide) for more information. You will submit your web page to **Turnitin.com** for an 'originality score' to help you avoid plagiarism.

6. **The plan should be holistic, since you are really managing an entire ecosystem, not just your target (keystone) species**. For example, other species that will benefit should be listed, and don't forget that humans are an essential component of the ecosystem as well. I'll have more to say about this in class.

Tentative breakdown for Biology 344

Class discussion	50
First lecture exam	50
Second lecture exam	50
Wildlife food plants ID quiz	20
Animal ID / life history quiz	20
Management Plan (web page and oral presentation)	100

Total	**290**

University grading policy

A = Excellent (4 honor points per credit hour)
A- = Excellent (3.667 honor points per credit hour)
B+ = Good (3.333 honor points per credit hour)
B = Good (3 honor points per credit hour)
B- = Good (2.667 honor points per credit hour)
C+ = Average (2.333 honor points per credit hour)
C = Average (2 honor points per credit hour)
C- = Average (1.667 honor points per credit hour)
D+ = Below Average (1.333 honor points per credit hour)
D = Below Average (1 honor points per credit hour)

In light of the above policy, grades for this course will be determined from the following scale:

93-100% = A
90-92% = A-
87-89% = B+
83-86% = B
80-82% = B-
77-79% = C+
70-76% = C
65-69% = C-
60-64% = D+
50-59% = D
<50% = F

Class materials to be handed out in 3-ring binders:

Bergland, M. Study guide for wildlife biology
Sample, D. and M. Mossman. Managing habitat for grassland birds.
Wildlife and your land. DNR publication
Deer management workbook and other related materials. DNR publication.
Wetland management study materials.