

COURSE SYLLABUS

REWM 5830 – Wildlife Habitat Ecology Spring Semester 2011

W 3:10 to 5:00 PM – AN 220

Instructor Information:

Instructor: Jeffrey L. Beck
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Office: Ag 2005
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Office Hours: W 1:00–3:00 PM or by appointment

Prerequisites:

STAT 2050 (or equivalent) and graduate status or instructor consent.

Course Description:

Wildlife Habitat Ecology is a graduate-level course for students in animal ecology, wildlife science, or rangeland ecology emphasizing the relationships between wildlife populations and their habitats. Emphasis on concepts forming the basis of wildlife habitat ecology including habitat and niche, carrying capacity, habitat measurements, resource selection, habitat–relationships modeling, habitat management, and habitat restoration. The course is designed as a readings course, where we will discuss relevant literature to broaden and refine our perspectives on concepts and current issues in wildlife habitat ecology. Consequently, students will be expected to prepare and present topical discussions to other class members

Disability Statement:

If you have a physical, learning, sensory or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 109 Knight Hall.

Objectives/Outcomes/Standards:

Course Objectives

1. To gain an understanding of the central concepts and theory framing wildlife habitat ecology
2. To become familiar with quantitative approaches to estimating and modeling habitat selection, suitability, and wildlife–habitat relationships
3. To encourage an interest in further learning about wildlife habitat ecology

Student Responsibilities

1. Participate fully in all class discussions
2. Read assigned material before class and prepare insightful presentations

Classroom Policies

1. Students are expected to: be on time, read literature before class, and participate in discussions
2. Academic honesty and integrity are University Policies. Failure to maintain these standards may result in a failing grade and/or referral to the Dean of students
3. Derogatory language or behavior based on race, gender, religion, political affiliation, sexual orientation, or physical or mental abilities is not appropriate for class

Text(s) and Readings:***Required Textbook***

Morrison, M. L., B. G. Marcot, and R. W. Mannan. 2006. *Wildlife-habitat relationships: concepts and applications*. Third edition. Island Press, Washington, D.C., USA.

Additional Readings

A readings list consisting of journal articles, book chapters, and other sources will be generated as the semester progresses.

Course Requirements/Assignments:***Grading Standards***

Grades will be assigned on the basis of percentage of total points earned.

- A = >90%
- B = 80–89%
- C = 70–79%
- D = 60–69%
- F = <59 %

Assignments

| Assignment | Number | Point Value | Total Points |
|-------------------------------|--------|-------------|--------------|
| Two-page literature summaries | 2 | 50 | 100 |
| 50-minute class discussions | 2 | 75 | 150 |
| Mid-term exam (take home) | 1 | 100 | 100 |
| Final exam (oral) | 1 | 100 | 100 |
| Participation (semester) | -- | 50 | 50 |
| Total | | | 500 |

Late Assignments

Because we will be depending on each other to provide weekly literature summaries and presentations there is no policy on late assignments. However, I will make accommodations for valid emergencies.

Attendance/Participation Policy:

1. Absences result in poor performance on assignments and exams, so please attend each class
2. University sponsored absences are cleared through the Office of Student Life
3. Other absences must be cleared through me

Academic Honesty:

The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated [from the UW General Bulletin]. Teachers and students should report suspected violations of standards of academic honesty to the instructor, department head, or dean. Other University regulations can be found at: <http://uwadmnweb.uwyo.edu/legal/universityregulations.htm>)

Tentative Guest Speaker Schedule:

| Date | Speaker | Affiliation | Topic |
|--------|-------------------------------|-----------------------------|----------------------------------|
| Feb 16 | Jennifer Hess and Chris Kirol | UW – Renewable Resources | Quantifying resource selection |
| Mar 9 | Dr. Liz Flaherty | UW – Zoology and Physiology | Effects of habitat fragmentation |
| Mar 30 | Clay Buchanan | UW – Renewable Resources | Disturbance risk |
| Apr 20 | Dr. Matt Kauffman | UW – Zoology and Physiology | Trophic cascades |

Course Outline:

| Preliminary Schedule | | |
|----------------------|---|----------------------------|
| Week | Topic | Assignment* |
| 1 (Jan 12) | Introductions and assignments | Chapter 1 |
| 2 (Jan 19) | Habitat fundamentals (habitat and niche) | Chapters 2 and 3 |
| 3 (Jan 26) | Describing habitats (ESDs, habitat types, etc.) | |
| 4 (Feb 2) | Habitat selection terminology and designs | Chapter 4 |
| 5 (Feb 9) | <i>SRM Meeting in Billings, Montana – No Class</i> | |
| 6 (Feb 16)** | Quantifying resource selection | Chapters 5 and 6 |
| 7 (Feb 23) | The landscape perspective of habitats (including migration) | Chapters 8 and 9 |
| 8 (Mar 2) | Habitat heterogeneity (edge effects, ecological traps, etc.) | Chapters 8 and 9 |
| 9 (Mar 9)** | Habitat fragmentation, loss, degradation | <i>Midterm Exam</i> |
| 10 (Mar 16) | <i>Spring Break – No Class</i> | |
| 11 (Mar 23) | Wildlife habitat–relationships modeling | Chapter 10 |
| 12 (Mar 30)** | Wildlife response to disturbance risk | |
| 13 (Apr 6) | Linking habitat selection to fitness and demography | |
| 14 (Apr 13) | Animal alteration of habitats (damage and ecological engineers) | |
| 15 (Apr 20)** | Wildlife habitat issues relative to trophic cascades | |
| 16 (Apr 27) | Wildlife habitat restoration ecology | |
| 17 (May 4) | <i>Final Exam – Wednesday, May 4 (3:30–5:30 PM)</i> | <i>Final Exam</i> |

*Suggested reading assignments from Morrison et al. (2006). Other readings to be assigned.

**Guest speaker.