Syllabus

Instructor: Kris Hundertmark
Office: 412 Irving I
Office hours: MW 8:00-10:00, TR immediately after lecture
Office phone: 474-7159
Email: fkh@uaf.edu

Teaching assistant: Torsten Bentzen
Office: 102 Irving I
Office hours: TR 9:00-11:00
Office phone: 474-7006
Email: fstwb@uaf.edu

Classrooms: Lecture—201 Irving I, TR 11:30-12:30
Lab—303 Irving I, T 2:00-5:00

Required text:

On Ereserve at Rasmussen Library (http://eres.uaf.edu/courseindex.asp):
and landscape ecology. Sinauer.

Course description:
WLF 201 is an introductory course to the field of wildlife management. It provides
students with a basic understanding of the practice of wildlife management, including
biological principles important to the understanding of wildlife populations and their
habitats as well as strategies implemented by resource managers to achieve specific
outcomes. The course will also introduce students to species of wildlife of management
interest in Alaska. Instructional methods will include lecture, computer simulations and
demonstrations.

This course requires students to have taken introductory biology courses as well as
ecology. It is recommended that students have microcomputer experience because
laboratory exercises will require use of a computer for much of the semester.

Course goals:
• Provide students with an understanding of a) the ecological principles governing
wildlife populations and their habitats, and b) principles underpinning
management of wildlife populations and their habitats for societal goals.
• Introduce students to aspects of the biology and management of different types of
wildlife, and current wildlife management issues in Alaska.
Examples of student learning outcomes:
Students will:

- Understand how the history of wildlife management in the United States has led to the current system of management
- Apply principles underpinning population growth and regulation to address wildlife management problems
- Differentiate among management strategies for decreasing and increasing wildlife populations
- Understand the effects of external influences on wildlife populations, such as predation, disease, parasites, weather, human disturbance and loss of habitat
- Identify Alaskan wildlife species of management interest and know their habitat affinities and life-history characteristics
- Understand and implement strategies for sampling wildlife populations
- Be able to analyze vital rates of wildlife populations with life-table analysis
- Construct simple population models using computer spreadsheets

Academic dishonesty: The UAF Student Code of Conduct is presented on page 73 of the 2005-06 UAF Catalog. You will be expected to abide by that code. No collaboration among students will be allowed on exams, quizzes or assignments unless expressly permitted by me. Copying or paraphrasing another student’s writing is a violation of the Student Code. Copying or paraphrasing published material without proper attribution is plagiarism and is a serious academic offense. If you are unsure what constitutes plagiarism, see the following web page or see me.
www.uaf.edu/library/instruction/handouts/Plagiarism.html
Evidence of academic dishonesty will be presented to the UAF Director of Judicial Services and may result in an F for the course and/or expulsion from the University.

Disabilities: If you have a learning disability, please inform me before the end of the second week of class. If you have not already contacted the UAF Center for Health and Counseling (474-7043; TTY 474-7045) to document your disability, please do so at your earliest opportunity. They will work with me to provide reasonable and appropriate accommodations for persons with documented disabilities.

Grading:
Grades will be assigned based on your performance on the 3 exams, laboratory exercises and exam, and an in-class presentation. Late assignments will not be accepted. Regardless of the point value of any item, each will be weighted to account for the following percentages of the final grade.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Final exam</td>
<td>20%</td>
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<tr>
<td>Laboratory exercises</td>
<td>20%</td>
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<tr>
<td>Wildlife species exam</td>
<td>10%</td>
</tr>
<tr>
<td>Wildlife species presentation</td>
<td>10%</td>
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</tbody>
</table>
Grading scheme

A  \geq 90\%  
B  80-89\%  
C  70-79\%  
D  60-69\%  
F  <60\%

**Attendance:** You are expected to attend all lecture and laboratory activities. I will not accept laboratory assignments from students who did not attend the laboratory from which the assignment was derived unless a waiver from me is obtained in advance. Waivers will be granted only in unusual circumstances.

**Schedule:** The accompanying lecture schedule is tentative and is meant to give you a general idea of the topics we will cover in class and lab and the order in which they will be presented. There may be times when it is necessary to stray from this schedule but I will make every effort to inform you ahead of time if that happens.

**Final exam: 11 May, 10:15-12:15**
The final exam will be comprehensive. More than half of the questions will cover the final third of the course with the remainder of the questions covering the first two-thirds of the course.

**Wildlife species presentations:**

At the end of the semester we will have student presentations on various wildlife species in lab. Students will check with me to select species and dates for their presentation. You must choose from the attached list of either a mammal or bird (or species group). You will research the species and prepare a PowerPoint presentation of 10 minutes in length summarizing aspects of the species’ life history and management. We will focus on Alaskan species.

Presentations should include at least one good picture of the species along with a range map. They should include life-history information such as life-span, productivity, breeding season, migration characteristics (if any), preferred habitats, food habits, management status in Alaska (harvested for sport and/or subsistence, protected, etc.), government agency with management authority, and any other pertinent information you care to include. You should also include a discussion of key characters for distinguishing this species in the field from similar species, or among the species if you are discussing a group. Finally, the presentation should include a brief summary of one research article concerning your species. You must cite at least 3 sources for your information, only one of which can be Internet-based. Be sure to properly cite any images you use from publications or the Internet. PowerPoint presentations will be turned in for grading after the presentations.
Presentations will be graded on organization and clarity of presentation, quality of visual aids, accuracy and completeness of information, conformity to time limit, and ability to answer questions from the class.

**Species list for presentations:**

**Mammals:**
- Moose
- Wolf
- Caribou
- Dall sheep
- Mountain goat
- Sitka black-tailed deer
- Elk
- Black bear
- Brown bear
- Wolverine
- Marten and mink
- Arctic fox and red fox
- Beaver and muskrat
- Land otter and sea otter
- Beluga
- Walrus
- Stellar’s sea lion

**Birds:**
- Canada goose (as a group)
- Other geese (emperor, white-fronted, brant, snow)
- Dabbling ducks (mallard, pintail, teal, etc.)
- Diving ducks (harlequin, scaup, goldeneyes, eiders, etc.)
- Mergansers (hooded, common, red-breasted)
- Swans (trumpeter, tundra)
- Loons (common, pacific, red-throated, yellow-billed, arctic)
- Grouse (ruffed, blue, spruce, sharp-tailed)
- Ptarmigan (willow, rock, white-tailed)
- Sandhill crane

**Ereserve:**
Supplemental materials are placed on Ereserve, which means they are accessible over the Internet from Rasmussen library’s website. The site is password-protected to conform to copyright restrictions. You are free to read those materials and print them for personal use. Go to the site [http://eres.uaf.edu/courseindex.asp](http://eres.uaf.edu/courseindex.asp) and search for courses with Kris Hundertmark as instructor (beware, there are some old materials from WLF 201 from previous years that haven’t been removed yet so don’t search by course title). This will take you to a screen where you can click on a link for WLF201, which will take you to a page that asks for a password. The password is WLF201. Click on the “accept” radio button and you will then see the reserve materials.
## Tentative lecture schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture topics</th>
<th>Reading assignment</th>
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<tbody>
<tr>
<td>1 (19 Jan)</td>
<td>Introduction</td>
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<tr>
<td>2 (24 &amp; 26 Jan)</td>
<td>History of wildlife management</td>
<td>Text Ch. 1 &amp; 10 Bolen &amp; Robinson* Ch. 1-3</td>
</tr>
<tr>
<td>3 (31 Jan &amp; 2 Feb)</td>
<td>Basics of populations</td>
<td>Text Ch. 2, 3, &amp; 5 Krasman* Ch. 7</td>
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<tr>
<td>4 (7 &amp; 9 Feb)</td>
<td>Populations (cont.)</td>
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<tr>
<td>5 (14 &amp; 16 Feb)</td>
<td>Population Estimation</td>
<td>Text Ch. 4; Krasman Ch. 15</td>
</tr>
<tr>
<td>6 (21 &amp; 23 Feb)</td>
<td>Catch-up and review; <strong>Exam 1</strong></td>
<td></td>
</tr>
<tr>
<td>7 (28 Feb &amp; 2 Mar)</td>
<td>Habitat, nutrition &amp; animal condition</td>
<td>Text Ch. 6 Krasman Ch. 13</td>
</tr>
<tr>
<td>8 (7 &amp; 9 Mar)</td>
<td>Habitats &amp; habitat management</td>
<td>Text Ch. 7 &amp; 8</td>
</tr>
<tr>
<td>9 (14 &amp; 16 Mar)</td>
<td>----SPRING BREAK----</td>
<td></td>
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<tr>
<td>10 (21 &amp; 23 Mar)</td>
<td>Harvest management</td>
<td>Bolen &amp; Robinson Ch. 10 Krasman Ch. 10</td>
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<tr>
<td>11 (28 &amp; 30 Mar)</td>
<td>Predation, disease, parasites, weather</td>
<td></td>
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<tr>
<td>12 (4 &amp; 6 Apr)</td>
<td>Catch-up and review; <strong>Exam 2</strong></td>
<td></td>
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<tr>
<td>13 (11 &amp; 13 Apr)</td>
<td>Big game &amp; furbearers</td>
<td>Text Ch. 15 &amp; 16</td>
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<tr>
<td>14 (18 &amp; 20 Apr)</td>
<td>Waterfowl &amp; upland birds</td>
<td>Text Ch. 17 &amp; 18</td>
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<tr>
<td>15 (25 &amp; 27 Apr)</td>
<td>Non-game &amp; endangered species</td>
<td>Text Ch. 20 &amp; 21</td>
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<tr>
<td>16 (2 &amp; 4 May)</td>
<td>Nuisance wildlife, exotics &amp; other contemporary issues</td>
<td>Text Ch. 22</td>
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<tr>
<td>17 (11 May)</td>
<td><strong>Final exam (comprehensive)</strong></td>
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*on Ereserve
Tentative lab schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Background reading</th>
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</thead>
<tbody>
<tr>
<td>2 (24 Jan)</td>
<td>Basics of data, statistics and sampling</td>
<td>Donovan &amp; Welden* Ch. 6</td>
</tr>
<tr>
<td>3 (31 Jan)</td>
<td>Sampling</td>
<td>Donovan &amp; Welden Ch. 7, 8</td>
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<tr>
<td>4 (7 Feb)</td>
<td>Population analysis: growth models</td>
<td>Donovan &amp; Welden Ch. 10</td>
</tr>
<tr>
<td>5 (14 Feb)</td>
<td>Population analysis: life tables</td>
<td>Donovan &amp; Welden Ch. 18</td>
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<tr>
<td>6 (21 Feb)</td>
<td>Population estimation</td>
<td>Donovan &amp; Welden Ch. 27, 28</td>
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<tr>
<td>7 (28 Feb)</td>
<td>Demographic stochasticity &amp; PVA</td>
<td>Donovan &amp; Welden Ch. 29</td>
</tr>
<tr>
<td>8 (7 Mar)</td>
<td>Harvest models</td>
<td></td>
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<tr>
<td>9 (14 Mar)</td>
<td>----SPRING BREAK----</td>
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<tr>
<td>10 (21 Mar)</td>
<td>Squirrel index (depending on snow conditions)</td>
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<td>11 (28 Mar)</td>
<td>Moose browse lab</td>
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<td>12 (4 Apr)</td>
<td>Cemetery demography</td>
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<tr>
<td>13 (11 Apr)</td>
<td>Mock Game Board Meeting</td>
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<tr>
<td>14 (18 Apr)</td>
<td>Big game species</td>
<td></td>
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<tr>
<td>15 (25 Apr)</td>
<td>Game bird species</td>
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<tr>
<td>16 (2 May)</td>
<td>Wildlife species exam</td>
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</tbody>
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