Park and Protected Area Management Field Studies  
FNRM 3206/5206  
Forest and Natural Resource Management  
Department of Forest Resources  
Summer Semester  
Monday, August 24– Wednesday, September 2, 2015  
2 credits

Instructor: Mae Davenport  
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Location: Hubachek Wilderness Research Center, Ely, MN

Course materials: Field Studies Course Packet, other required readings on tablet provided

Course description:

The course is designed to be a directed field study of park and protected area management including observation of and training in (1) recreation planning and visitor management, (2) cultural resource management, (3) natural resource management, (4) nature-based tourism management, and (5) resource interpretation and communication across local, state, federal and tribal park and protected areas in northern Minnesota. The course commences with a “grand challenges” symposium panel of park and protected area professionals and concludes with a “grand solutions” symposium panel of students.

Students will investigate grand challenges in park and protected area management in topics including natural resource extraction, invasive species, recreation impacts, wildlife monitoring, cultural resource protection, environmental interpretation and communications, and nature-based tourism management. Students will be asked to identify, define and solve problems associated with each of the grand challenges. They will consider each challenge through multiple lenses including the “triple bottom line” of sustainability: economy, equality, and ecology. Students will develop an understanding of diverse park and protected area management philosophies including cross-agency and cross-cultural perspectives on natural resource and environmental management. Students will explore innovative partnerships between tribal, federal, state and local natural resource management agencies, as well as the influence of non-profit and advocacy organizations and unique public-private relationships in the region.
Students will partner with organizations such as the USDA Forest Service, Bois Forte Band of Chippewa Department of Natural Resources, Explore Minnesota Tourism, Minnesota Department of Natural Resources and Wilderness Outfitters to receive hands-on training in park and protected area management skills such as wilderness planning, recreation impact inventory and trend analysis, cultural resource inventory and monitoring, wildlife monitoring, fisheries monitoring, invasive species identification and surveillance, key informant interviewing, resource communications and interpretation, environmental conflict management, and wilderness camping, canoeing and orienteering.

One highlight of the course is a 3-day wilderness canoe trip. Students will experience the Boundary Water Canoe Area Wilderness and wilderness management challenges and opportunities first hand. Besides enjoying a unique backcountry canoeing and camping experience, students gather data for the Superior National Forest’s recreation resource monitoring program. Students will develop or hone wilderness camping, canoeing and orienteering skills.

The course also provides a unique opportunity for students to interact with park and protected area managers (e.g., Superior National Forest, Boundary Waters Canoe Area Wilderness, Lake Vermillion State Park, Soudan Underground Mine State Park, and Bois Forte Reservation), nature-based tourism industry professionals (e.g., Ely Chamber of Commerce, Explore Minnesota Tourism) and private tourism operators and non-profit organization representatives (e.g., Friends of the Boundary Waters, International Wolf Center, North American Bear Center, Conservationists with Common Sense, local resorts and outfitters). These interactions will enhance student comprehension of the complexities and uncertainties in protected area management decision making and will provide opportunities for student networking with practitioners in multiple positions with varying public, private and non-profit organizations.

Students will develop communication, natural resource interpretation, and environmental conflict management skills through information gathering and reporting out on their grand challenges. Students will meet with natural resource, cultural resource and nature-based tourism professionals, as well as non-profit organization representation in small and large groups. Students will communicate with these individuals informally (e.g., small group discussions, field assignments) and formally (e.g., formal oral and written presentations, key informant interviews).

**Learning objectives:**

This course is designed to provide students with an understanding of park and protected area management through onsite, hands-on experiences in park and protected area settings. Specific learning objectives are to:

1. Observe and critically examine the relationships between humans, human communities and parks and protected areas.
2. Understand and apply principles of sustainable park and protected area management.
3. Observe and critically examine diverse management philosophies including how agency structure, culture, policy and programs influence social, ecological and economic conditions.
4. Investigate current problems and trends (i.e., grand challenges) in park and protected area management.
5. Investigate the consequences of management strategies and tactics across park and protected areas, human communities and ecosystems.
6. Develop skills in identifying and monitoring natural resource conditions and social/cultural conditions.
7. Demonstrate knowledge and skills in problem-solving including identifying, monitoring and mitigating problems in park and protected area management (i.e., grand solutions).
8. Communicate effectively with peers and park and protected area professionals and develop skills in gathering and reporting on information gathered to diverse stakeholders.

**Student evaluation:**

*Field assignments and reporting (30%):* Students will complete field assignments/activities and report procedures and outcomes in the course packet. Students will also participate in pre-brief and debrief sessions and other activities each day. Students must complete required readings in preparation for activities and discussion sessions.

*Student presentation (30%):* Students will present on their grand solutions including problem description and solutions to park and protected area professionals.

*Student one-page report (20%):* Students will prepare in teams a one-page synthesis of their grand solution including problem statement and strategies to distribute to park and protected area professionals.

*Final oral exam (20%):* Students will complete a final oral exam at the end of the course. Students will be asked a series of questions about their grand challenges and solutions.

The +/- system on an A-F grading scale will be used as follows. Grades of ‘I’ (incomplete) are typically not given.

- A ≥ 93%
- A- ≥ 90%
- B+ ≥ 87%
- B ≥ 83%
- B- ≥ 80%
- C+ ≥ 77%
- C ≥ 73%
- C- ≥ 70%
- D ≥ 60%
- F < 60%

**Special Notes:**

*Course Materials:*
Field Studies Course Packet (binder), handouts, and course readings
**Student Conduct Code:** The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community. As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see: [http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html](http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html).

Note that the conduct code specifically addresses disruptive classroom conduct, which means “engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities.”

**Scholastic Dishonesty:** You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: [http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html](http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html)) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: [http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html](http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html).

**Disability Accommodations:** The University is committed to providing quality education to all students regardless of ability. Determining appropriate disability accommodations is a collaborative process. You as a student must register with Disability Services and provide documentation of your disability. The course instructor must provide information regarding a course’s content, methods, and essential components. The combination of this information will be used by Disability Services to determine appropriate accommodations for a particular student in a particular course. For more information, please reference Disability Services: [http://ds.umn.edu/students/Enrolled/responsibilities.html](http://ds.umn.edu/students/Enrolled/responsibilities.html).

**Student Mental Health and Stress Management:** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via [http://www.mentalhealth.umn.edu/](http://www.mentalhealth.umn.edu/).
Other Policies and Services: For information on other course polices/university services please see:

- Use of Personal Electronic Devices in the Classroom: http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html
- Sexual Harassment: http://www1.umn.edu/regents/policies/humanresources/SexHarassment.html
- Mental Health Services: http://www.mentalhealth.umn.edu.
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<th>Schedule:</th>
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<th>Topic and Activities</th>
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<td><strong>Day 1</strong>&lt;br&gt;Monday, August 24&lt;br&gt;<strong>Professionals Grand Challenges Symposium</strong>&lt;br&gt;Ely, Hubachek Wilderness Research Center (HWRC)</td>
<td><strong>7:30am</strong> - Departure for Ely, review course packet&lt;br&gt;<strong>1:00pm</strong> - Park and protected area professionals “grand challenges” panel, Kawishiwi Ranger Station.&lt;br&gt;<strong>3:00 pm</strong> - Pioneer Mine visit and Ely Chamber of Commerce visit Field Assignment: Complete scavenger hunt activity Evening Campfire Debrief: Team-building and selection of “grand challenges” Base Assignments: Complete draft interview guide, <em>Manning</em> (2012) pgs. 3-56; <em>Cole</em> (1989), <em>Seidman</em> (2006)</td>
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<td><strong>Day 2</strong>&lt;br&gt;Tuesday, August 25&lt;br&gt;<strong>Monitoring Recreation Impacts and Invasive Species</strong>&lt;br&gt;Superior National Forest Kawishiwi Ranger District</td>
<td><strong>7:30am Morning Pre-brief:</strong> <em><strong>Draft interview guide due</strong></em>&lt;br&gt;<strong>9:00am</strong> - Visit Ranger District office, meet with Jack Greenlee, plant ecologist, and Steve Cochran, wilderness manager, SNF. Field Assignments: (1) Recreation impact monitoring (inventory and trend analysis), (2) terrestrial invasive species identification and monitoring&lt;br&gt;<strong>3:00pm - Interview #1:</strong> Chris Eilrich, Ely Wild Woods&lt;br&gt;<strong>4:00pm - Interview #2:</strong> owner or manager, Wilderness Outfitters&lt;br&gt;<strong>TBD - Interview #3:</strong> Owner, Timber Trails Lodge and Resort&lt;br&gt;Evening Campfire Debrief: Squaring the Circle, Base Assignments: Manning Ch. 7 &amp; 8, Bois Forte Comp Plan (2010)</td>
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<td><strong>Day 3</strong>&lt;br&gt;Wednesday, August 26&lt;br&gt;<strong>Human Values, Cultural Resources, and Nature-based Tourism</strong>&lt;br&gt;Bois Forte Heritage Center, Ely-Winton Historical Museum</td>
<td><strong>7:30am Morning Pre-brief&lt;br&gt;8:30am</strong> - Meet with Bill Latady, Bois Forte Heritage Center;&lt;br&gt;<strong>10:30am</strong> - Meet with Lee Johnson, archeologist, SNF; (Tim Campbell, NE Director, Explore MN Tourism.)&lt;br&gt;<strong>1:00pm</strong> - Meet with Ely-Winton Historical Museum representatives and tour center Field Assignments: Complete site visit worksheet for Heritage Center &amp; Historical Museum&lt;br&gt;<strong>4:00pm - Set mammal traps</strong>&lt;br&gt;Evening Campfire Debrief: Web of Life&lt;br&gt;Base Assignments: Complete narrative analysis activity, <em>Manning</em> Ch. 13 &amp; 14</td>
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<td><strong>Day 4</strong>&lt;br&gt;Thursday, August 27&lt;br&gt;<strong>Wildlife Science, Management and Communication</strong>&lt;br&gt;International Wolf Center, North American Bear Center, Farm Lake</td>
<td><strong>7:00am Morning Pre-brief&lt;br&gt;7:30am</strong> - Mammal monitoring with mammologist Dr. George Feldhamer&lt;br&gt;<strong>11:30am</strong> - Visit International Wolf Center&lt;br&gt;<strong>3:00pm</strong> - Visit North American Bear Center Field Assignments: Complete site visit worksheet for Wolf &amp; Bear Centers&lt;br&gt;<strong>5:00pm</strong> - Motorized recreation experience: pontoon trip and BBQ dinner&lt;br&gt;Evening Campfire Debrief: Communication and interpretation discussion lead by grad student Base Assignments: <em>Manning</em> Ch. 15 &amp; 18, <em>Poly-Met Mine</em> (2014), <em>Digging into the Promise of Copper</em> (2013), <em>Dvorak</em> (2012)</td>
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<td><strong>Day 5</strong>&lt;br&gt;Friday, August 28</td>
<td>**8:00am Morning Pre-brief: <em><strong>First 4 days assignments due</strong></em>&lt;br&gt;<strong>9:00am</strong> - Into BWCAW Field Assignments: encounter monitoring, campsite monitoring, wilderness</td>
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<td>Day 6  Saturday, August 29</td>
<td>BWCAW</td>
<td>Field Assignments: encounter monitoring, campsite monitoring, wilderness character monitoring</td>
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<td>Day 7  Sunday, August 30</td>
<td>BWCAW</td>
<td>Field Assignments: encounter monitoring, campsite monitoring, wilderness character monitoring</td>
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<td>Day 8  Monday, August 31</td>
<td>Soudan Underground Mine State Park</td>
<td>11:00am - Return from BWCAW <em><strong>BWCAW assignments due</strong></em>&lt;br&gt;1:00pm - Visit SUMSP, meet with James Pointer, park interpreter&lt;br&gt;Field Assignments: Complete site visit worksheet for SUMSP&lt;br&gt;3:30 or 4:00pm - Meet with Conservationists with Common Sense representative;&lt;br&gt;6:00 or 6:30pm - Meet with Friends of Boundary Waters and Representative&lt;br&gt;<strong>Evening Campfire Debrief</strong>: Issue framing&lt;br&gt;Base Assignments: <em>Manning Ch. 23 &amp; 25</em></td>
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<td>Day 9  Tuesday, September 1</td>
<td>Bear Head Lake State Park</td>
<td><strong>Morning Pre-brief</strong>: Assignments due&lt;br&gt;8:30am - Visit Bear Head Lake, meet with Matt Hennen, fisheries research biologist, DNR&lt;br&gt;Field Assignments: (1) panfish trapnetting and (2)aquatic invasive species identification and monitoring&lt;br&gt;Base Assignments: <em>Anderson Recreation Resource Management Handbook (1998)</em>&lt;br&gt;PM - Prep for grand solution symposium&lt;br&gt;<strong>Final oral exam</strong></td>
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<td>Day 10  Wednesday, September 2</td>
<td>Kawishiwi Ranger District Home</td>
<td><strong>Morning Pre-brief</strong>: <em><strong>Remaining assignments due</strong></em>&lt;br&gt;AM - Continue symposium preparation&lt;br&gt;1:00pm - Presentation: “Grand solutions for park and protected area management,” Park and protected area professionals attend provide feedback&lt;br&gt;3:00pm - depart for Twin Cities</td>
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