

WIS 4523: HUMAN DIMENSIONS OF NATURAL RESOURCE CONSERVATION

WIS 4523, Section 0227x (3 credits), Fall 2016

Tuesday -- Period 8 (3:00-3:50) Room 222 N-Z; Thursday -- Periods 8 and 9 (3:00-4:55) Room 219 N-Z

Instructor:

Dr. Susan "Dr. J" Jacobson

Professor, Dept. Wildlife Ecology and Conservation, 310 Newins-Ziegler Hall, **Phone:** 846-0562, **email:** jacobson@ufl.edu

Office Hours: Tuesday, 10:00 - 11:30 am, and by appt.

Teaching Assistant:

Jane Anderson, PhD Candidate, School of Natural Resources & Dept. Wildlife Ecology and Conservation, Building 150 Room 14A, **email:** janeanderson@ufl.edu

Office Hours: Thursday, 1:30-2:30 pm

Course Description:

The field of human dimensions of natural resource management focuses on how people's knowledge, values, and behaviors influence decisions about the conservation and management of natural resources. This course will provide an interdisciplinary overview, drawing from the social sciences and humanities, of the theory and practice of environmental communication, public involvement in wildlife conservation, and integrated ecosystem management. Through the use of local and international case studies, the course will explore how we can incorporate information about people's desires, attitudes, and behaviors into the process of resource management. Topics will include conservation outreach campaigns, park interpretation and management, environmental education, sustainable development, ecosystem management, stakeholder assessment, environmental negotiation, and cultural aspects of conservation. Participants will develop practical skills in environmental communication and analysis of resource management issues, and an understanding of the development, implementation, and evaluation of the human dimensions of wildlife conservation research and practice.

Course Objectives

By the end of the course, students will be able to:

- Understand wildlife stakeholders;
- Analyze audiences relevant to natural resource management issues;
- Become familiar with human dimensions research tools, such as surveys, group processes, and content analyses;
- Write an editorial or blog promoting a conservation issue;
- Understand approaches for designing environmental communications;
- Evaluate park interpretation materials;
- Understand ecosystem management approaches and interdisciplinary methods for addressing nature conservation;
- Analyze natural resource problems from gender and cultural perspectives;
- Demonstrate environmental negotiation skills;
- Explain challenges of sustainable development;
- Articulate direct and indirect benefits of natural resources; and
- Work with a partner and in groups.

Readings:

Text: *Communication Skills for Conservation Professionals 2nd Edition* (S.K. Jacobson, Island Press, Washington, D.C., 2009).

Course Readings (Available online and at www.wec.ufl.edu/faculty/JacobsonS/wis4523/)

In addition to these materials, a variety of human dimensions/conservation-oriented journals are available in our libraries and on line. These will be useful for your assignments, and include: *Human Dimensions of Wildlife*, *Environmental Conservation*, *Journal of Environmental Education*, *Environmental Management*, *Conservation Biology*, *Society and Natural Resources*, *Environment and Behavior*, *Human-Wildlife Interactions*, and *Journal of Interpretation Research*.

Summary of Assignments and Grades:

Survey Questions (3%)

Propaganda statements about climate change (3%)

Conservation editorial for newspaper or blog (200-300 words) (12%)

Design of interpretive exhibit for McCarty Woods Conservation Area (12%)

Evaluation (and criteria) of environmental interpretation (3 pages) (8%)

Personal ecological footprint (2%)

Gender/culture article explanation (4%)

Attendance/Participation (6%)

Exam I (25%)

Exam II (25%)

(Extra Credit) Optional Art example for conservation (1%)

SYLLABUS

August 23 Course introduction

August 25 Human dimensions: examples from the WUI (Wildland-Urban Interface)

August 30 – Environmental communication; Conservation campaigns; Behavior Change Theory

Readings:

Jacobson, Chapter 1 *Communications for Conservation* and Chapter 2 *Influencing Public Attitudes and Behaviors*

September 1 –Research methods in human dimensions

Readings:

Jacobson, Chapter 4 *Researching Audiences Using Quantitative Approaches* and

Chapter 5: *Audience Research Using Qualitative Approaches*

Assignment due 1 September: Write sixteen questions for a survey of Florida residents about Florida panthers.

September 6 - Using mass media for conservation

Readings:

Jacobson, Ch. 8: *Using Mass Media*

Skim editorials on class Website for ideas and format for your editorial (or blog) due on 29 September. Maybe change this to class blog or to making a brochure as the assignment?

(Think about: What is your favorite blog or website?)

September 8 - Targeting audiences; Persuasive writing

Readings:

Jacobson, Chapter 3 *Designing a Public Communications Program*, and see list of propaganda types on page 64.

Skim the Website of “Conservation International,” an international environmental NGO, for their coverage of climate change issues; Find and skim the Website of a “climate change denial” group.

Assignment due 8 September:

Propaganda Examples (6) about climate change.

September 13 - Environmental interpretation for resource management; Parks and publics.

Readings:

Jacobson, Chapter. 9: *Methods and Materials for Interpreting the Environment*

Ehrenberger, et al. *Designing a Conservation Message*

September 15 – Field trip to the McCarty Woods; Designing interpretive materials

Meet in our classroom.

Group project: Design an interpretive exhibit based on your assessment of audience needs and site goals. Your materials should demonstrate your knowledge of effective interpretive techniques and sound educational

approaches. Final products due on 8 October.

September 20 – Environmental Education

Readings:

Jacobson, Ch. 10: *Conservation Through Education*

September 22 - Creativity and Collaborative Problem-Solving

Readings:

Dehaan, 2011. Teaching Creative Science Thinking

September 27 - Program Evaluation – Success or Failure?

Readings:

Jacobson, Ch. 11: *Evaluating and Monitoring Program Success*

Assignment due 27 September: Conservation editorial

September 29 - Field trip to assess existing interpretive materials and people management at NATL

(Meet at NATL at the pavilion - across from the Entomology building at 3:30)

Readings:

Review all previous readings about interpretation, education, and evaluation to develop criteria.

Assignment due 29 September: Based on the readings and class discussion, pass in one list and bring 1 hard copy to the field trip of your criteria for assessing the interpretive materials at NATL. (A 3-page summary of results will be turned in by pairs on 11 October.)

October 4 – Climate Change Adaptation and Mitigation (Guest Lecture: Megan Walker-Radtke, Office of Sustainability)

Readings:

Skim: Cameron-Devitt et al. Climate change impact on biodiversity in Florida – white paper executive summary
Pages: 9-14

October 6 – Conservation Psychology and Climate Change

Group Portfolio Critique of Interpretive Exhibits developed for Reitz Pond;

Readings: CRED The Psychology of Climate Change, Pages 1-44.

Assignment due 6 October: Present to class and pass in completed mock-up exhibit and summary for the U.F. McCarty Woods Conservation Area.

October 11 – Sustainability: Conservation and Development Issues in the Built Environment (Guest lecture: Dr. Hostetler)

Readings:

Assignment due 11 October: Calculate your personal ecological footprint using the calculator at the website of The Nature Conservancy or World Wildlife Fund, or at www.myfootprint.org or similar website. Pass in your printed score and number of planets needed if everyone lived as you do. List two ways that you would improve the footprint calculator to improve its accuracy or improve the behavioral response of people calculating their footprint (to be persuaded to decrease their footprint).

October 13 – Exam 1.

October 18 – Economics and Environment (Dr. Elizabeth Pienaar)

Readings:

Decker et al. Ch. 6. Economic considerations in wildlife management. Pages 68-83

Pimental, S. et al. 1997. Economic and environmental benefits of biodiversity. *Bioscience* 47(11)747-757. (in several parts)

Assignment due 18 October: Pass in 3-page evaluation of NATL interpretive programming.

October 20 – Conservation Planning (Guest lecture: Dr. Karl Didier)

Readings:

TBA

October 25 – Ecotourism to Promote Conservation (Guest Lecture: Dr. Taylor Stein)

Readings:

Honey, M. 2008. Ecotourism and Sustainable Development: In search of the golden toad. Island Press. Wash. D.C. pp 3-33

October 27 - Ecosystem Management - field trip to Morningside Nature Center

(Meet to carpool at parking lot south of Newins-Ziegler Hall on Museum Road)

Readings:

Silvy ed. 2012 Adaptive management in wildlife conservation, pages 43-54 in Wildlife Techniques
Meffe et al. 2002 *Ecosystem Management: Adaptive, Community-based Conservation* Ch 2. pp. 57-76. And pp. 95-111. An in-class assignment will be based on this reading, come prepared.

November 1 - Gender, Ethnicity, and Cultural issues in conservation

Readings:

Killer Whale article 2004. Gainesville Sun

Floyd, M. 1999. Race, ethnicity and use of the National Park Service. *Social Science Research Review* 1(2)1-24.

Schmidt and Stricker, 2010. What tradition teaches: indigenous knowledge complements western wildlife science

Assignment due 1 Nov: Pass in one article concerning gender or cultural issues in resource management in the United States and one-page statement (see end of syllabus).

November 3 – Conflicts and Negotiation in Environmental Conservation

Readings:

Class Hand-outs (turn back in on Thursday, 19 November), Case study from Harvard Program on Negotiation

Review: Jacobson, Chapter 7.

Assignment due 10 November: Read over confidential stakeholder material handouts and do not discuss with anyone before the Negotiation

November 8 - Stakeholder Analysis, Group Processes and Involvement in Wildlife Management (Guest speaker Dr. Kai Lorenzen)

Readings:

Jacobson, Chapter 7 *Communicating with Groups*

Decker et al. Human Dimensions of Wildlife Management Ch. 11. Stakeholder engagement in wildlife management pages 139-156

November 10 –Environmental Negotiation: Harvard case study on fisheries management (TA: Jane)

November 15 – Community-based Conservation (Guest speaker: Dr. Brian Child)

Readings:

Mulder and Coppolillo. 2005. Ch. 2 The evolution of policy (pages 28-52) in *Conservation: Linking Ecology, Economics and Culture*

November 17 - Using the Arts for Conservation

Readings:

Nature's Voice. 1998. *International Wildlife*. July/August, p. 50.

Jacobson in Chapter 6, pp 183-185.

Assignment due:

Pass in an example of Art to inspire wildlife conservation – 1% extra credit-TBA

November 22 – TBA

November 24 – Happy Thanksgiving break

November 29 – Religion and Environmental Conservation Readings:

- McKibben, B. 2006. The gospel of green. Will evangelicals help save the earth? *Onearth* 28:35-37.
McDuff, M. 2010. Natural Saints: How people of faith are working to save God's Earth, pages 3-10.
Skim: Lynn White Jr. 1967. The Historical Dimensions of our Ecologic Crisis. *Science*.

December 1 - Exam II

December 6 - Results of Nominal Group Technique

Grading

All assignments must be typed! Hand-written assignments are not acceptable. For assignments, one page = approximately 250 words. Do not email assignments unless you are sick and unable to attend class; or unless other instructions are provided. Assignments are due at the beginning of the class they are assigned. Late papers will receive a 10% deduction in grade daily (no exceptions). The grading scale will be 97-100= A+, 94-96 =A; 90-93=A-, 87-89=B+, 84-86=B, 80-83=B-, 77-79=C+, 74-77=C, 70-73=C-, etc., 61-69 = D range, and <61 = Unacceptable (E).

Overview of Assignments and Grades

1. Assignment due 1 September:

Survey Questions - 3%.

Write sixteen questions for a survey of Florida residents to measure their (a) knowledge, (b) attitudes, and (c) behaviors regarding the recovery of Florida Panthers, and (d) socio-demographic background questions. Write 4 questions in each category of these categories (a-d) that would help us understand this audience and how to promote panther conservation. Follow the instructions in the textbook for writing clear survey questions.

(Grading rubric = 6.25% for each of 4 questions in the 4 categories (16 total)).

2. Assignment due 8 September:

Propaganda Examples - 3%

Read background editorials about climate change assigned for today.

Based on the list of 6 propaganda types (bandwagon, testimonial, emotional appeal, card-stacking, name-calling/loading words, and repetition) listed in Jacobson, Chapter 3, page 64, choose 5 types of propaganda and write a brief (one or two sentences) example for each of these 5 types of propaganda, arguing either for or against the notion that climate change is a major threat and human caused and that people should address it with policy/regulation/behavior change. (Students with last names beginning with A to K will write anti-climate change messages. Students with last names beginning with L to Z will write pro-climate change action messages.) Use actual examples from the articles or websites about climate change, or make up examples of propaganda you think might work based on the readings about human behavior and potential barriers to addressing climate change. Identify each propaganda technique and ensure that each of your 5 examples clearly demonstrate a different, specific propaganda technique. Pass in typed examples and discuss in class.

(Grading rubric = 20% for each of 5 examples of different propaganda types).

3. Assignment due 27 September:

Editorial or blog for Conservation - 12%

Write a 200-300-word editorial (or blog post, which would also have pictures) on a conservation topic of your choice; Follow the format, examples, and criteria provided in assigned readings. *(Grading rubric will be based on criteria: 1. sentence structure, format, clarity (25%); 2. use of mental imagery, analogy, relevant language; lively quotations or story (25%); 3. raises an audience need, concern or interest (25%); 4. presents consequences, solutions, and desired actions (what should the reader do?!)) (25%).* If editorial is published = automatic A+ (105 points!)

4. **Assignment due 29 September:** Present to class and pass in completed mock-up exhibit and summary for McCarty Woods Conservation Area

Development of Interpretive Materials for the McCarty Woods Conservation Area –12%

Design an interpretive exhibit based on your assessment of audience needs and site goals. You may choose any topic to interpret within 300 m. of the pond. Your materials should demonstrate your knowledge of effective interpretive techniques and sound educational approaches. Select a subject appropriate for the site and audience. Present the materials in class, and pass in with a 1-page description and logic model of your proposed audience, theme, content, technique, and potential method of evaluation of effectiveness. The logic model should show your audience, input, output and outcomes (*Grading rubric = effectiveness of material (ABCD's of interpretation) (75%) and 1-page write-up (25%).*)

5. Assignment due 6 October (criteria) and 18 October (summary):

Evaluation of Environmental Interpretation Materials - 8%

Based on the readings and class discussion, bring a list of criteria for assessing the interpretive materials at NATL. This consists of the existing kiosks, signs and trail brochure/leaflet. Think about the audiences, objectives, materials, delivery systems, messages, etc. Include a brief recommendation for additional techniques and content/themes the park should provide. October 1, Bring TWO copies to the field trip (one to pass in on October 1). These will be modified and implemented with a partner during our field trip. A 3-page summary of results will be turned in by each pair on 11 October. Include a. (*Grading rubric = 10% initial criteria, 90% summary of findings*). *Grading rubric for summary: 25% discussion of audience and objectives, 25% discussion of materials, delivery systems, and messages; 25% discussion of graphics, layout, and format, and 25% other factors affecting visitors at park and recommendations for additional techniques and content/themes the park should address.*)

6. Assignment due 11 October:

Calculate your personal ecological footprint using the calculator at the website of The Nature Conservancy, World Wildlife Fund, or at www.myfootprint.org or similar website. Pass in your printed score and number of planets needed if everyone lived as you do, or personal score and percent of resources you are using (depending on website calculator). List two ways that you would improve the footprint calculator to improve its accuracy or improve the behavioral response of people calculating their footprint (to be persuaded to decrease their footprint). –2 %

7. Assignment due 1 November.

Gender or Cultural Issue Article - 4%

Find one professional journal article concerning gender, ethnic, or cultural issues in resource management in the United States. Bring a copy to pass in at class with a 1-page statement describing how your example demonstrates how recognition and attention to gender and cultural differences may affect local or national natural resource conservation, and whether lack of attention to this issue will have consequences on our natural resource base in 2050. Be prepared to discuss in class (*Grading rubric = 50% article submission, 50% explanation statement.*)

8. Extra Credit (Optional) Assignment due 17 November.

Art to inspire wildlife conservation – 1%

Think about how poetry, art, music, literature, etc. may inspire a conservation ethic. After doing the readings, think about some type of art that has inspired you, and bring it to class to share/pass in (*Grading rubric = 100% art brought to class*).

9. October 13, Examination I - 25%

10. December 1, Examination II - 25%

11. Class participation - 6%

Part of the success of the course depends on your active involvement in class discussions and activities. Attendance is taken at each class. After **one** unexcused (by a doctor's letter) absence, any missed classes will be subtracted from **this portion** of your grade (- 5% each time). Participation involves careful and respectful listening to everyone and participation in discussion. Please speak loudly enough so that everyone can hear you. Always turn off your cell phones during class.

University of Florida Academic Notes

Academic Honesty

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to this commitment to academic honesty and understand that

my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

UF Counseling Services

Resources are available on campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
2. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
3. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling;
4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Software Use

All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."*