

ENVIRONMENTAL INTERPRETATION
WIS 6525, Section 3155 (3 Credits) 2016

Meeting time: Wednesday, 10:40-1:40 (Periods 4-6); Room 219 Newins-Ziegler Hall
Instructor: Dr. Susan Jacobson, Professor, Department of Wildlife Ecology and Conservation
Office Hours: Tuesdays 10:00-11:30, and by appointment, 310 Newins-Ziegler Hall
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Course Description:

Environmental interpretation is an integral part of natural resource management. Environmental interpretation involves the design, implementation and evaluation of programming about the environment for a variety of audiences and settings, including parks, nature centers, zoos, and communities. It is a communication process designed to reveal to the public meanings and relationships of biological and cultural resources through experiences with objects, organisms, and landscapes. Techniques range from public presentations to printed materials and the use of mass media. This course explores the theoretical basis for designing programs and practical techniques for effective environmental interpretation. Readings and assignments are drawn primarily from the fields of communication, environmental education, resource management, social psychology, and public relations.

The class will be conducted in a lecture, discussion and interactive format. Field trips and hands-on activities will provide experience in the development and evaluation of interpretive techniques and audiences. A group project will allow participants to assess audience needs and design interpretive materials for a local natural area. Students are responsible for weekly readings, engaged discussion, writing assignments, participation in field trips, a group interpretation project, and a research oral presentation.

Course Objectives:

Upon completion of this course, students will understand and demonstrate competency in the following:

- Philosophical foundations of environmental interpretation
- Communication and learning theory as it relates to interpretation
- Audience research analysis for planning and programming
- Personal and non-personal techniques for effective interpretation
- Use of interpretation for solving natural resource management problems
- Methods of evaluating the effectiveness of interpretive programs
- Skill in designing, implementing, and assessing interpretive techniques, such as interpretive talks, exhibits, publications, and audiovisual materials
- Critical and Creative thinking skills
- Collaborative problem-solving and ability to work in groups

Primary Text: Jacobson, S., McDuff, M., and Monroe, M. 2015. Conservation Education and Outreach Techniques. Oxford University Press, UK. 480 pp. **Secondary Texts:** Journal articles and book chapters (available on Canvas or at Science Library reserve reading).

Overview Assignments and Grades:

- Brochure for conservation, due **12 Oct.** (15%)
- Evaluation of environmental interpretation program at NATL (3 pages), criteria due **19 Oct.** individual grade, summary due **2 Nov.**, partnership grade (12%)
- Group interpretation project (mock-up exhibit) due **2 Nov.**, final project due **30 Nov.**, (group grade) (27%)
- Bring to class 2 examples and present the use of internet/social media for environmental outreach. **9 Nov.** (5%).
- Exam – Open book. **16 Nov.** (8%)
- Oral research presentation (virtual term paper), with 1-page summary outline and 6 journal citations, due **7 Dec.** (27%)
- Class attendance and participation (6%)

Note: We will go outdoors during a number of classes. Please dress accordingly and bring an umbrella, raincoat, water, insect repellent, etc.

SYLLABUS

August 24 - Course introduction – Environmental Interpretation and an Interpretive Planning Exercise

August 31 - Overview of Planning, Implementing and Evaluating Environmental Interpretation

Read:

Jacobson et al., 2015. Ch. 1: *Designing successful conservation education and outreach*

Jacobson et al., 2015. Ch. 2. *Learning and teaching with adults and youth (skim)*

Tilden, F., 1957. *Interpreting Our Heritage*, p. 9, pp. 32-39.

September 7 - Audience Research – Understanding and Targeting Audiences

Read:

Jacobson et al., 2015. Ch. 3. *Changing conservation behaviors*
Knudson Ch. 4. *Values of interpretation for management*. PP 65-79.

September 14 - Developing Publications

Read:

Jacobson et al., 2015. Ch. 9. *Marketing conservation*
Jacobson et al., 2015. Ch. 10 *Getting out your message using the written word*
Kollmuss, A. and J. Agyeman, 2002. Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research* 8(3):239-260

Note: Assignment due in two weeks related to print material: Brochure for Environmental Conservation

September 21 - Planning Exhibits, Field Trip to Florida Museum of Natural History, (Guest Lecture); Meet at Museum entrance on Hull Drive at 11 am.

Read:

Jacobson et al., 2015. Chapter 6. Using the arts for conservation
Jacobson et al., 2015. Chapter 12. Designing On-site Activities

September 28 – Creativity and Collaborative Problem-Solving

Read:

Jacobson et al., 2015. Ch. 5. *Using the arts for Conservation (skim)*
Dehaan, 2011. Teaching Creative Science Thinking. Science
Mitchell and Kowalik, Creative Problem Solving (CPS) (skim)
Veverka, J.A. 1994. *Interpretive Master Planning*. Falcon Press Publishing, Inc., Montana. Chapter 3: *The Interpretive Planning Process*, p. 29-64 (skim)

October 5 – Designing Guided Walks and Self-Guided Trails (field trip to Santa Fe Teaching Zoo -- carpool arrangements)

Read:

Jacobson et al., 2015. Ch. 5. *Making conservation come alive (skim)*
Ham, S. 2013. Chapter 9. *Sequential Theme Development*
Jacobson et al., 2015. Chapter 4. *Conservation education in the schools (skim)*

At the zoo assignment - create and give a thematic guided walk (following chapter on sequential theme development)

October 12 - Group work developing an interpretive plan and exhibit for UF McCarty Woods Conservation Area;

Evaluation

Read: Knudson Ch. 5. *The Clients*. PP 81-103.

Assignment due:

Brochure for Conservation: Design and write a brochure (double-sided format) to convince an audience to shift an attitude or take a conservation action. This may be of the subject of your choice or related to some aspect of climate change.

Follow the format, examples, and criteria provided in class and assigned readings. Bring final copy to class on October 12th. Everyone will serve as an editor for classmates. (Opportunity to turn in revised brochure next week).

October 19 - Evaluation of Interpretive Programs;

Field Trip to UF- NATL to conduct your evaluation with a partner. Meet at NATL pavilion across from the entomology/nematology building at 11:00.

Read:

Review Jacobson et al., 2015. Chapter 1.
Ferraro, P.J. and S.K. Pattanayak. Money for nothing: a call for empirical evaluations of biodiversity conservation investments. *PLoS Biol* 4(4):e105. (skim)

Assignment due: Bring a list of evaluation criteria for on-site interpretation to this class **Evaluation of Environmental Interpretation Materials**

With a partner, evaluate the interpretive experience at *NATL*. **Write a 3-page summary of results of your evaluation of NATL interpretation– one report to be turned in with your partner. Assignment due Nov 2(10%)**

October 26 – Conducting Oral Presentations

Read:

Jacobson et al., 2015. Ch. 8: *Networking for Conservation (skim)*
Olson, Chapter 3. Don't be such a poor story-teller. Pages 81-118.

November 2 – Group Critique on McCarty Woods Conservation Area Exhibit - Interpretation project

Internal Critique of Exhibit Materials

Groups present your mock-up interpretive exhibits to class for discussion and critique. Critique of undergraduate exhibits.

Assignment due: Pass in 3-page summary of results of your evaluation of NATL interpretation– one report to be turned in with your partner.

November 9 – Developing Audiovisual Programs; Social Media and Outreach

Read:

Jacobson et al., 2015. Chapter 11. *Taking advantage of technology*

Bator, R.J. and R.B. Cialdini. 2000. The application of Persuasion Theory to the development of effective pro-environmental public service announcements. *Journal of Social Issues* 56(3): 527-541.

Assignment due: Comparison of social media use by environmental organizations

Prepare for class discussion on Nov 9: Choose 2 wildlife/environment organizations and review their websites and social media platforms. Outline their similarities and differences in audiences targeted, social media used, and types of behaviors they want their audiences to do or change, and types of appeals used. Discuss and pass in a brief (one-page), outline or table (3%).

November 16 – Exam (open book)

November 23 – Happy Thanksgiving!

November 30 - Pass in and review Final Exhibits for McCarty Woods Conservation Area

Assignment due: Pass in Final Exhibits

December 7 –Speed Presentation of an environmental interpretation research topic (5 -minute presentations) to class.

Assignment due: 5-minute presentation of your research topic “virtual term paper” to the class. Incorporate everything we've studied about how people learn, speaking in public, organizing presentations, etc. to deliver the substance of your research topic to the class. You also will evaluate the classroom presentations given by each other, based on criteria such as: professionalism, clarity and organization, appropriate props or graphics, effective topic summary, and quality of analysis. Reminder: Feel free to be creative! Remember the interpretive mantra that people remember/learn more from what they do than from what they hear. Additionally, please bring a 1-page summary of your topic and a list of 6 journal references to pass out to the class. If you give them to me in advance, I'll make the copies. Note, presentations will be timed. You may select any topic that focuses on "cutting edge" research in environmental interpretation/communications/education and it may pertain to your own thesis research.

Additional Information about Assignments:

Brochure for Conservation (15%) Design and create a double-sided brochure (2 pages) to convince an audience to shift an attitude or take a conservation action. The brochure may be about the subject of your choice or may be related to some aspect of climate change. Follow the format, examples, and criteria provided in class and assigned readings. These include addressing an audience need or concern, and presenting a “solution” or actions that you want the audience to do. Bring hard copy to class on October 12th. Everyone will serve as an editor for classmates. (Opportunity to turn in revised brochure next week). (Grading rubric: format (20%), ABCD's for brochures (30%), message and content 50%).

Evaluation of Environmental Interpretation Materials (12%)

With a partner, evaluate the interpretive experience at UF-NATL. Think about the audiences, objectives, materials, messages, and other criteria for effective interpretation. Also think about what additional materials would improve outreach or enhance the visitor experience. Write a 3-page summary of your evaluation results **with your partner**. (Grading rubric: 20% each for critical evaluation of: audience(s)/goals and objectives/materials and graphics/content and messages/additional issues and materials needed.) **Due Oct. 19 (criteria) and Nov. 2. (summary)**

Social Media Analysis (5%). Choose 2 wildlife/environment organizations and review their websites and social media platforms Outline their similarities and differences in audiences targeted, social media used, types of behaviors they want their audiences to do or change, and types of appeals used. Are they effective? Discuss in class and pass in your brief (one-page) outline or table

Exhibit - Group Interpretive Project (27 %)

Develop an interpretive plan and interpretive exhibit for **UF McCarty Woods Conservation Area**.

Groups bring your draft interpretive materials, results of surveys or assessments, and other research results and draft materials (one kiosk/exhibit design and content, or other methods discussed in advance) to class for discussion, comparison, and critique. Preliminary interpretive material is due **November 2** for Discussion and Internal Critique of Draft Interpretive Plan and Sample Materials; a second critique may be requested. Final interpretive plan, materials and presentation due **November 30**. Present group products to experts. (Grading rubric: Interpretive plan report summary 1-2 pages: including a logic model, any audience research conducted and ideas for evaluation (20%), interpretive material (appropriate content for audience, following ABCD's of interpretation from readings and class field trips, clear thematic title, message and content; evidence of central and peripheral approaches (application of Elaboration Likelihood Model/4 organs model/affective and cognitive approaches/etc.) (80%).

Oral Presentation of environmental interpretation research topic – virtual term paper (27%)

Give a 5-minute presentation of your research topic “virtual term paper” to the class. Incorporate everything we've studied about how people learn, speaking in public, organizing presentations, etc. to deliver the substance of your research topic to the class. You also will evaluate the classroom presentations given by each other, based on criteria such as: professionalism, clarity and organization, appropriate props or graphics, effective topic summary, and quality of analysis. Reminder: Feel free to be creative! Remember the interpretive mantra that people remember/learn more from what they do than from what they hear. Additionally, please bring a 1-page summary outline of your topic and a list of 6 journal citations to pass out to the class. You may select any topic that focuses on "cutting edge" research in environmental interpretation/communications/education. (Grading rubric: 1 page summary outline and list of journal articles 20%; Presentation (80%).)

Presentation rubric:

Professionalism and presentation style (includes: well-rehearsed presentation is 5 minutes long (+/- 30 seconds); follows all rules of effective oral presentations covered previously in class);

Clarity and organization (presentation has clear theme and intro/middle/conclusion, see rules for guided walks),

Appropriate props or graphics (effective use of audio-visuals or props, which make presentation better and more memorable; shows knowledge of interpretive techniques to make material relate to audience and provoke interest); Effective topic summary (reflects knowledge of how people learn, and provides an overview of a research topic related to research in the broad fields of environmental interpretation/communication/education);

Quality of analysis (presentation of an interesting/innovative synthesis about a particular topic in environmental interpretation/communication/education that interests the presenter; this will be presented as though the presenter has written a term paper about it and is presenting their findings).

Handout- a 1– page Summary should outline the highlights of the research topic (research question and key findings) presented; list of 6 journal articles should be scholarly literature from interpretation/communication/education fields used in or pertinent to the presentation.

Class attendance and participation (6%) We cover a lot of material each class; attendance is required. More than one absence will delete 10% from your attendance grade (6% of total) for each additional absence. Active listening and engagement in discussion is expected. Please turn off cell phones during class.

Grading

Late papers will receive a 10% deduction in grade **daily** (no exceptions). *All assignments must be typed and left-hand justified.* The grading scale will be 90-100 = Excellent (A), 80-89 = Good (B), 70-79 = Average (C), 60-69 = Below Average (D), and <60 = Unacceptable (E). Please pass in assignments single-spaced, on recycled or duplex paper except for brochure or interpretive material. (Note: one page = 250 words).

University of Florida 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.”

