

## Effective Communications in Fisheries and Wildlife Science (FW 489)

**Course Credits:** 3

**Enforced Prerequisites:** FW488

**Justification:** Most of the issues we face in natural resource management are at least mildly controversial, and require critical thinking to ensure that appropriate science is available to decision-makers. This kind of problem solving requires individuals who can work together, identify biological and ecological principles that apply to the problem, evaluate and synthesize available data from a variety of sources, and present information in an unbiased and comprehensible fashion to different audiences. At the same time, scientists should be aware of the social context in which their recommendations may be used. Our two term capstone sequence is designed to provide students with examples and experience of how natural science can inform decision-making, preparing them for challenges they will likely face as natural resource agency personnel, scientists, educators, and law enforcement agents. FW489 is designed to improve student communication skills.

Students in FW pursue diverse career tracks including scientist, educator, and administrator. Regardless of the destination, effective communication skills are essential to being a successful professional and most careers will require the ability to effectively communicate complex messages, often to diverse audiences. The course will center on two main activities: 1) lecture, discussion and short exercises focused on understanding different communication styles and medium; and 2) an independent project requiring students to develop a suite of products based on the group project they started in FW488. In addition to traditional forms of communication, we will cover web sites, computer conferencing, and dealing with print, radio, and television media. We will also discuss differences between objective reporting and advocacy. Students will then be required to produce a report and two forms of outreach material dealing with their individual group projects.

**Description:** This continues the 2 course capstone sequence for FW majors emphasizing the analysis, synthesis and interpretation of information and written and oral communication of management, education or policy statements. The course will be taught spring term every year and in sequence with FW488 that will be taught during winter. We will meet twice per week (80 minutes each session) with a lecture and discussion on the first day each week and Group Project work on the second day to assure designated time for Group Project activities.

In this course, groups will work on a variety of methods for presenting their projects to different audiences. In addition to lectures on how to communicate effectively, we will discuss science and advocacy, the role of science in policy-making, conflict resolution skills for communicating with diverse audiences, and working with the media.

**Course Content:**

Week/topic	Assignment/Exercise	Grading emphasis: Group (G) or Individual (I)
Week 1: Introduction/to whom are we communicating and what forms of communication are possible?	Identification of group project audience	G
Week 2: Science advocacy: duty or oxymoron?	Critique of position statements v. press release	
Week 3: Communicating science to scientists	Data presentation lab; Outreach Product Plan	G
Week 4: Communicating science to non-scientists	Abstracting a paper	I
Week 5: Dealing with uncertainty / misuse of science	In class discussion centered on uncertainty associated with specific group projects.	G
Week 6: Extension	None	
Week 7: E-communications (email, conference calls, etc..)	Group e-conference exercise	
Week 8: Media relations	Media interviews. Final group project report due end of week.	I
Week 9: Group Presentations	Group presentations	G, but individual components identified
Week 10: Outreach presentations	Group presentations	As above

**Student Learning Outcomes:**

Learning outcomes flow from the Departments Outcome Assessment strategy. This course will focus on 2 of the 6 skill areas identified in that plan: Critical Thinking and Communication. Specific outcomes include:

1. Recognize bias and assumptions in the work of others, identify assumptions in his or her work, and recognize bias in media coverage of science. Distinguish between anecdotal and rigorously derived information.
2. Dissect a complex natural resource problem into constituent parts and synthesize information to reach a defensible management recommendation or policy statement.
3. Generate written, visual, or oral products to communicate your recommendations or conclusions to two different audiences.

**Group Project:** This course is the second of our two-course capstone sequence in FW that will require each student to work in a small group on a topic related to fisheries and wildlife science, conservation, management, or education. The purpose of the Group Project is to provide students with the experience of problem solving in a group through original research or review of data and literature on a controversial management issue. Prior to enrolling in this course, each student will have already worked as part of a group in FW488 and developed a detailed outline for a final report on the project of their choosing. For a reminder of the goals of the group project; please refer back to your FW488 syllabus. The objective in FW489 is to complete the final report and prepare additional materials that communicate your key findings to several audiences that you will identify during this term. You will present your final products in class during the last two weeks of the term.

**Evaluation of Student Performance:**

Final Report	200
Oral presentation	100
Outreach product	100
Peer evaluations	50
<u>In class assignments</u>	<u>50</u>
Total	500

Grading on the report and in class participation will emphasize the cognitive skills outlined in the learner outcomes section above. Grading of lab exercises or weekly assignments will focus on application of concepts presented discussed during each week and learner outcomes related to effective communication. Peer evaluations will focus on a third skill area in the FW Department's assessment plan: leadership and team building skills. Each student will be evaluated by their group member on their abilities in two areas: 1) Collegiality and Team Building and 2) Interpersonal Communication. The final project report will be graded using a rubric that allocates points to content but also the cognitive skills listed in learner outcomes 1 and 2 above.

Your grade for the course will be determined from a standard percentage scale of your cumulative points:

A = 93-100, A- = 90-92.9, B+ = 87-89.9, B = 83-86.9, B- = 80-82.9, C+ = 77-79.9, C = 73-76.9, C- = 70-72.9, D+ = 67-69.9, D = 63-66.9, D- = 60-62.9, F < 60.

**Learning Resources:**

Course material will come from the primary literature and other sources collated for students as they work on their group projects.

Examples include:

Jacobson, S. K. 2005. Communication for Wildlife Professionals. Pp. 24-42 in C. E. Braun ed. Techniques for Wildlife Investigations and Management. The Wildlife Society, Bethesda Maryland.

Jacobson, S. K. 1999. Communication skills for Conservation Professionals. Island Press, Washington DC.

**Students with Disabilities:** Students with documented disabilities who may need additional accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Accommodations for disabilities are collaborative efforts between students, the course instructor, and Services for Students with Disabilities (SSD). Students with disability accommodations approved through SSD are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss those accommodations. Students who believe they are eligible for disability accommodations but who have not yet obtained approval through SSD should contact SSD immediately at 737-4098.

**Student Conduct** (<http://oregonstate.edu/admin/stucon/plag.htm>)

Students are expected to be honest and ethical in their academic work. Academic dishonesty is defined as an intentional act of deception in one of the following areas:

- \* cheating- use or attempted use of unauthorized materials, information or study aids
- \* fabrication- falsification or invention of any information
- \* assisting- helping another commit an act of academic dishonesty
- \* tampering- altering or interfering with evaluation instruments and documents
- \* plagiarism- representing the words or ideas of another person as one's own