Plan to Implement the Discipline-Specific 
Spoken, Visual, and Written Communication Requirement 
In the Fisheries Science and Wildlife Science Majors

The Department of Fisheries and Wildlife Sciences offers Bachelor of Science degrees in two majors: Fisheries Science and Wildlife Science. The goals and objectives for these closely related majors are identical but implementation of plans to achieve the goals and objectives differ because students in the two majors take different classes in the junior and senior years. In both majors, the requirement will be met through a Communication-across-the-major approach. Students will write, speak and communicate with visual media in nearly every class in both majors. Furthermore, the variety of assignments will ensure that students graduating in both Fisheries Science and Wildlife Science are proficient in writing and speaking to technical as well as popular audiences and in using visual media that are appropriate to their audiences.

**Goal:** Students who graduate in Fisheries Science and Wildlife Science will be able to communicate clearly and effectively in writing and by speaking to technical audiences and a variety of nontechnical audiences (ranging from children to adults and from interested citizens to policy makers). Students will be able to employ effective and appropriate visual communication techniques that complement their writing and speaking. Students will be able to employ a wide variety of written and oral communication techniques (as well as accompanying visual communication tools) that are appropriate to their intended audiences.

**Objectives:**

Upon completion of the Bachelor of Science degree in either Fisheries Science or Wildlife Science, the student will be able to—

1. Describe and explain scientific principles and results of research in a variety of technical formats, including but not limited to, journal-quality manuscripts, technical reports and log books for field and laboratory research.

2. Describe and explain scientific principles and results of research in a variety of nontechnical formats, including but not limited to, executive briefs, newspaper articles, popular magazine articles and opinion-editorials.

3. Effectively portray data in tabular and graphic formats to support both technical and nontechnical publications.

4. Design and deliver effective presentations for both technical and nontechnical audiences in either oral or poster format.

5. Effectively utilize graphics, photographs and other visual media to support oral and poster presentations.
Implementation—Fisheries Science:

Communication objectives in Fisheries Science will be met in the following suite of courses:

1. NR 1114—Introduction to Natural Resources (Freshman year)
2. FiW 2114—Principles of Fisheries and Wildlife (Sophomore year)
3. FiW 3414—Fisheries Techniques (Junior year)
4. FiW 4424—Ichthyology (Junior year)
5. FiW 4614—Fish Ecology (Junior year)
6. FiW 4514—Principles of Aquaculture (Senior year)
7. FiW 4464—Human Dimensions of Fisheries and Wildlife (Senior year)
8. FiW 4714—Fisheries Management (Senior year)

Throughout this suite of Fisheries Science courses, students will write a wide variety of technical and nontechnical articles, management plans, scientific sampling plans and opinion-editorials. Technical articles will be reviewed and rewritten in at least two different classes. Students also will make presentations (both technical and nontechnical) in multiple classes. Presentations will range from brief summaries of current events in natural resources to executive briefings for policy makers and presentation of results of empirical research. They will use increasingly sophisticated analysis and graphical displays to support their writing and speaking as they progress through the curriculum.

Implementation—Wildlife Science:

Communication objectives in Wildlife Science will be met in the following suite of courses:

1. NR 1114—Introduction to Natural Resources (Freshman year)
2. FiW 2114—Principles of Fisheries and Wildlife (Sophomore year)
3. FiW 2324—Wildlife Field Biology (Sophomore year)
4. FiW 2314—Wildlife Biology (Sophomore year)
5. FiW 4984—Wildlife Field Techniques (Junior year)
6. FiW 4414—Population Dynamics and Estimation (Junior year)
7. FiW 4434—Wildlife Habitat Ecology (Junior year)
8. FiW 4474—Wildlife Habitat Evaluation (Junior year)
9. FiW 4464—Human Dimensions of Fisheries and Wildlife (Senior year)
10. FiW 4314—Conservation of Biological Diversity (Senior year)

Throughout this suite of Wildlife Science courses, students will write a wide variety of technical and nontechnical articles, management plans, scientific sampling plans, field and laboratory log books and opinion-editorials. Technical articles will be reviewed and rewritten in at least two classes. Students also will make presentations (both technical and nontechnical) in multiple classes. Presentations will range from brief summaries of current events in natural resources to executive briefings for policy makers and presentation of results of empirical research.
research. They will use increasingly sophisticated analysis and graphical displays to support their writing and speaking as they progress through the curriculum.

Assessment:

We will assess outcomes associated with this change in curricula through periodic surveys of employers of our graduates. The surveys will ask employers to rate the performance of graduates of our program on all items related to the objectives listed above. Our desired performance indicator will be at least 75% of employers rating our graduates as good or excellent for each communication-related item.