NRES 285—Wetland Delineation & Classification
Jeff Matthews

Objective: Students will gain an appreciation of the ecological, social and economic context within which U.S. federal wetlands legislation is implemented.

Learning Outcomes:
1. Working in teams, students will apply the federally mandated wetland delineation process in the field and prepare a wetland delineation report on behalf of a hypothetical development company.
2. Students will then prepare a comment letter on behalf of a hypothetical conservation organization that is opposed to development plans within the wetland area delineated by another team.
3. Through these activities, students will gain experience in teamwork, technical field skills, technical writing and persuasive writing.
4. Students will evaluate the ecological, social and economic impacts of alternative courses of action to gain an understanding of the broader, cumulative impacts of real-world environmental decisions.

How to Implement These Outcomes: In previous years, students in this course have worked in teams to delineate (i.e., identify, describe and map) a wetland in the field. This activity requires technical expertise and integration of course field experience and lecture material. I propose to incorporate sustainability considerations by requiring a broader evaluation of the complex socio-ecological issues surrounding wetlands regulations. In addition to the technical delineation report, students will prepare a comment letter on behalf of a hypothetical conservation organization that is opposed to development within the wetland area delineated by a different student team. The comment letter will discuss the students’ analysis of the broader ecological, social and economic impacts of development within wetlands. These activities will enable students to consider multiple alternatives to a real-world environmental problem. Many former students in this course have taken jobs with environmental consulting companies that perform wetland delineations. The proposed activity provides future students experience in evaluating the broader context of on-the-job decisions.

How to Assess Progress on These Outcomes:
1. Students will work in teams of 4 to 5 to prepare two graded documents: a wetland delineation report and a comment letter. These represent 40% of the course grade.
2. A final exam with essay questions will also be used to assess student progress.

Plans to Implement the Above: The course was offered for Fall 2010, but was cancelled due to low enrollment. The course will be offered again in Fall 2011. In previous years, students have performed wetland delineations in St. Joseph, IL. Students have also interacted with guest speakers—former University of Illinois students who currently work in the wetland delineation field. These activities will continue in 2011. In addition, I will contact Cecily Smith, an attorney with the Prairie Rivers Network, to ask if she will make a guest presentation to the class. Ms. Smith prepares comments and guidance to regulatory agencies regarding wetlands and clean water issues.