

**VASCULAR AQUATIC PLANTS BOT**  
**4990/5990, Sec. 050, 3 credit hours-August 2009**

**Course Description:** An introduction to the aquatic and wetland plants of the south-central United States, with emphasis on their identification, distribution, ecology, adaptations to the aquatic environment, economic significance, and control. Also an introduction to aquatic and wetland habitats, with emphasis on their ecogeographic features and distribution. Course designed for biologists, ecologists, wildlife biologists, teachers, range scientists, and other individuals who need or want to be familiar with aquatic and wetland plants.

**Topics Covered:** Terminology of plant description. Use of taxonomic keys for identification of unknown plants. Techniques of collecting and preserving aquatic plants. Field recognition of common species, genera, and families. Classification of aquatic/wetland habitats. Morphological and physiological adaptations to the aquatic environment. Distribution and dispersal of aquatic plants. Governmental regulations.

**Lecture & Laboratory Activities:** Lecture and laboratory work will be combined and involve a review of the topics listed above. Reading assignments will be assigned as each topic is covered. Numerous field trips will facilitate study of plants and habitats.

**Research Project:** Each undergraduate participant will develop a reference collection of 12 taxa encountered in the field. Individuals earning graduate credit are required to develop a reference collection of 15 taxa encountered in the field. All participants are required to keep a daily journal. .

**Time Required:** Approximately 8-10 hours per week outside of class will be needed to complete the reading assignments and review the material presented.

**Examinations:** One mid-session and one final examination will be given and will comprise recognition of taxa, and short-answer and essay questions covering conceptual material. Quizzes covering recognition of species, genera, families, and habitats will be given in the field.

**Grading Policy:** The assigned course grade will be based on a percentage of the total points possible. In general, A = 100-90%, B = 89-80%, C = 79-70%, and D = 69-60%.

**Textbooks:** A textbook will not be used; rather journal articles and a compendium of handouts will be employed.

**Other Materials:** Two dissecting needles, a single-edged razor knife, 15 cm ruler, and 10X hand lens are essential. Two 3-ring notebooks holding 8.5 x 11 inch and 5.5 x 8.5 paper will be needed to hold informational handouts. All items will be available at the Station's bookstore. Old tennis shoes, socks, and pants that will withstand repeated submersion in water and mud and can be thrown away at the end of the course are recommended.

**Reasonable Accommodation:** Any student interested this course who has a disability that may prevent him or her from demonstrating his or her abilities should contact me, as well as Janet Issac (UOBS) at 1-405-325-7431, and the Office of

Disability Services, Goddard Health Center, Rm. 166, 1-405-325-3852, as soon as possible so that accommodations necessary to ensure full participation and to facilitate educational opportunities can be discussed.

**Instructor: Bruce Smith, The University of Oklahoma fronds02@yahoo.com**