

## **Courses Taught at Valdosta State University**

### *Elements of Biological Science I*

An introductory level, mixed majors/non-majors course in basic principles of biology, including cellular chemistry, structure and function of cells, genetics, and microevolution.

### *Elements of Biological Science II*

An introductory level, mixed majors/non-majors course in basic principles of micro- and macroevolution, diversity, and structure and function of representative organisms.

### *Introduction to Biology: The Evolution and Diversity of Life*

An introductory level, non-majors course in the principles of micro- and macro-evolution and diversity of life.

### *Biodiversity Lab*

A non-majors laboratory course to accompany *Introduction to Biology: The Evolution and Diversity of Life*.

### *Natural History for Middle School Teachers*

An upper level course for Middle Grades Education majors, using the biota of southern Georgia as a model for studying basic ecological principles, population structure and dynamics, life history patterns, and reproductive strategies and behaviors common to living systems.

### *History and Use of Medicinal Plants*

A general course for non-majors, comprising a brief history of medicinal plants from prehistory to the present, including the use of herbal and non-timber forest products in different cultures and countries.

### *General Botany*

A sophomore-level course for majors comprising a survey of diversity, evolution, and reproductive cycles of the plant kingdom and development, structure and function of representative seed-bearing plants.

### *Ecology and Evolution*

An introduction to major topics in ecology and evolution for biology majors, including population, community, and ecosystem ecology.

### *Local Flora*

A field-oriented, elective course in descriptive botany and diversity, emphasizing identification, distribution, and ecology of locally occurring seed-bearing plants. Also cross-listed for graduate credit.

### *Taxonomy of Seed Plants I*

An upper level, elective course in descriptive botany and diversity, dealing with principles of classification and nomenclature; classification, evolution, and a survey of diversity of major families; and identification of local representatives, using dichotomous keys in a technical floristic manual. Also cross-listed for graduate credit.

### *Taxonomy of Seed Plants II*

An advanced upper level, elective course in descriptive botany, dealing with a survey of diversity, classification, and evolution of selected, technically difficult, specialized families (e.g., Asteraceae, Poaceae, Cyperaceae, Juncaceae) and the identification of local representatives, using dichotomous keys in technical floristic manuals. Also cross-listed for graduate credit.

### *Dendrology*

A field-oriented elective course emphasizing trees of the southeastern United States and forest communities of North America, including field identification, description and classification of forest communities, and a study of reproductive cycles, anatomy, and development of representative species. Also cross-listed for graduate credit.

### *Plant Systematics (subsumes Taxonomy of Seed Plants)*

An upper level, elective course surveying the principles of plant systematics, including identification, nomenclature, evolution, and classification within the plant kingdom, and a systematic survey of plant families, with emphasis on local representatives. Also cross-listed for graduate credit.

*Morphology of Land Plants*

An upper level, elective course emphasizing vegetative organization, reproductive cycles, phylogenetic and ecological relationships of bryophytes, pteridophytes and seed plants. Also cross-listed for graduate credit.

*Ethnobotany*

An upper level, elective course surveying the use of plants by humans, including the significance of plants in sustaining human life, the diversity, origins, and history of plant uses, the origins of agriculture, and the roles of science and technology in enhancing agricultural production. Also cross-listed for graduate credit.

*Directed Study*

An upper level, elective course for majors, involving supervised investigation of a specific problem and preparation of a final report.

*Senior Seminar*

An upper level, capstone course for the Biology major, assessing the student's ability to research topics in biology independently, assimilate information, and disseminate information in an organized and understandable manner in both written and oral forms.

*Laboratory Practicum*

An upper level course for Biology majors involving individualized instruction and practice in assisting with the preparation and teaching of biology laboratory exercises.

*Graduate Seminar*

A graduate level course involving discussion and reports of current topics in biology and related sciences, in which students are expected to demonstrate comprehension of topics and communication skills, both oral and written.