



HANCOCK BIOLOGICAL STATION ON KENTUCKY LAKE

SUMMER 2012

Each summer Murray State University's Hancock Biological Station provides an outstanding offering of field oriented environmental and ecological courses. Short Session Courses meet Monday through Friday. Regular Session Courses meet all day, twice a week so that people can take 2 courses during this session. Scholarships and housing are available. Contact the Station for additional details. Scholarship applications should be completed by May 1, 2012. Find out more by visiting the Station's web site (www.murraystate.edu/hbs) or calling 270-474-2272 (ask for Gerry Harris, or e-mail her at gharris@murraystate.edu).



Short Session Courses May 14 – May 25

BIO 507/607 – FIELD BIOLOGY OF AMPHIBIANS AND REPTILES – The course focuses on the field identification of local amphibian and reptile species and the methods and techniques of observing, sampling, and estimating population size and densities. Field trips cover on the full spectrum of habitats available in our area. Students design and carry out a short term research project focusing on the above (3 credit hours) **Dr. Ed Zimmerer**, Murray State University



BIO 585/685 – RESTORATION ECOLOGY – Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. This course focuses on the interaction of ecological theory and conservation practice to promote ecological restoration as a means of sustaining the diversity of life on Earth and reestablishing an ecologically healthy relationship between nature and humans (4 credit hours) **Dr. Howard Whiteman**, Murray State University

Full Session Courses May 29 – June 29

BIO 330 – PRINCIPLES OF ECOLOGY – An introduction to the basic principles and concepts of ecological systems. Emphasis is placed on community ecology. Much of the course is devoted to field observations and experimentation. The course is aimed primarily at undergraduate Biology majors (4 credit hours) (Monday & Thursday) **Dr. Robert Martin**, Murray State University

BIO 553/663 – FIELD BOTANY – A survey of the flora of west Kentucky and surrounding states. Emphasis is placed on field identification of common species, use of keys, collection and preparation of specimens, and general plant ecology of the region (4 credit hours) (Wednesday & Saturday) **Dr. Ralph Thompson**, Berea College

BIO 564/664 – ENTOMOLOGY – The study of insect ecology and diversity. Students become acquainted with about 200 families of insects living in terrestrial and aquatic habitats along with biotic and abiotic factors underlying their distribution, abundance, and dynamics. Agricultural systems will be included. Each student makes a collection and conducts a project on some aspect of ecology, behavior, or, natural history (4 credit hours) (Tuesday & Friday) **Dr. Michael Flinn**, Murray State University



BIO 670 – LIMNOLOGICAL ANALYSIS - The course provides the conceptual frameworks and techniques for measurement of physical, chemical, and biological phenomena in lakes and reservoirs. Emphasis is placed on experimental approaches to field and laboratory studies (4 credit hours) (Tuesday & Friday) **Dr. George Kipphut & Dr. Susan Hendricks**, Murray State University and Hancock Biological Station



BIO 514/614 SCANNING ELECTRON MICROSCOPY – The study of the theory, principles and applications of scanning electron microscopy (SEM). After a predetermined number of instructional hours, the student is expected to successfully complete a test that measures competency in SEM operation, specimen preparation, and remote operations. The course includes remote operations where teachers have access to the microscope for use in their own classrooms (4 credit hours) (Monday & Thursday) **Dr. David White & Ms. Karla Johnston**, Murray State University and Hancock Biological Station

Sessions Arranged

491 - 494 UNDERGRADUATE RESEARCH TOPICS - Designed for undergraduates who wish to do directed independent research in an area of field biology. A faculty member must agree to direct the research. (1 to 4 hours credit may be taken). Time arranged.

691 - 694 GRADUATE TOPICS IN BIOLOGY - Designed for graduate students who wish to do directed independent research in an area of field biology. A faculty member must agree to direct the research. (1 to 4 hours credit may be taken). Time arranged