

**Environmental Biology**  
**Course Syllabus: Shortened Version**  
**Loyola University Chicago**  
**Monday-Friday, 9:00 am to 5:00 pm**  
**June 30 to July 18, 2008**

**COURSE DESCRIPTION:**

Chicago is the perfect urban setting to investigate Environmental Science. Located directly on Lake Michigan, as well as close to restored parks, agriculture and forest preserves, this program provides students with the opportunity to visit sites impacted by humans and observe, first-hand, how we affect the landscape around us. Students will learn in a hands-on environment, both in lab and field settings. Focusing on contemporary environmental issues, students will be introduced to researchers from Loyola's Center for Urban Environmental Research and Policy (CUERP) and discover how information learned in the classroom can be applied in scientific research. Presentations given by professionals in the field will give students insight into the management implications of rehabilitation, restoration and maintenance.

A large component of this course is designed to teach students lab and field skills that will be used throughout their scientific careers. Students will visit sites impacted by urbanization and agriculture, as well as restored and preserved sites. In groups, students will form hypotheses pertaining to these sites, collect data on field trips, determine results and present their findings at the end of the class. Students will learn to identify aquatic insects and algae, along with examining dynamic and important groups of organisms in aquatic ecosystems that are used to help scientists monitor changes in the environment.

The class will be structured to teach students about pertinent environmental issues, the connections between biological communities and the habitats in which they live, the current research being implemented regarding these topics, how professionals are using this research in management, and techniques used in environmental monitoring, all with an emphasis on biology. Relevant topics, such as global warming, invasive species, genetically modified crops, pollutants, and other human impacts on the environment will be addressed. Overall, students will learn field and lab skills and gain a greater appreciation for how information they learn in the classroom can be applied in the real world.

**Required Texts:**

To be determined

**Exams:**

There may be a practical exam based on organisms we identify in the lab and collect in the field.

**Grading:**

Grades will be based on the group project and presentation, lab and field exercises, weekly response papers (1-2 pages), exams, attendance and class participation.

**Attendance:**

Mandatory