EEOB 5930: Ichthyology

Semester Credit Hours – 4 under/grad

Prerequisites
Completion of 12 semester-credit hours in biological sciences or equivalent, at least junior standing by summer enrollment, GPA minimum of 2.5, or permission of instructor.

Credit
4 undergraduate/graduate semester credit hours

Course Meetings and Instructor Availability
M, W, F 0800-1600
Instructor will be available by appointment (daytime and evening) for office hours, and optional review sessions.

Course Description
This course will introduce students to the diversity of fishes with emphasis on fishes of the Laurentian Great Lakes. Students will study fish evolution and systematics by exploring morphological differences. Behavioral and ecological implications of evolution and morphological differences will be explored. As a field and laboratory course, students will gain hands-on experience in the collection, preservation, identification, and morphology of fishes found in Lake Erie and nearby streams, rivers, and wetlands. Field and laboratory exercises will provide additional opportunities to evaluate natural history and ecological patterns. An experiential learning project will result in a laboratory report that will be completed in class.

Course Objectives
• Understand relationships between evolution, ecology, and morphology
• Evaluate patterns between phenotypic expression based on fish morphology and behavior
• Use and create dichotomous keys to identify fishes of the Great Lakes basin
• Learn external fish anatomy and scientific nomenclature
• Become familiar with methods of collecting and studying fishes through hands-on field and laboratory experience

Instructor:
Dr. Thomas P. Simon
Adjunct Professor
Indiana University, Bloomington
tsimon@indiana.edu
**Teaching Approach**
The course will be taught using a combination of lectures, discussions, laboratory exercises, field trips, and group projects. Field experience will enable students to learn about fish preferred habitat, natural history, and behavioral patterns. I will provide opportunities for undergraduate research for students interested.

**Grading**
Grading will be based on laboratory practicals, written exams, exploratory research report, and participation. Students will be expected to actively participate in the learning process in all aspects of the course in the field and classroom.

**Texts**

**Required**

  *Highly recommended if you plan to pursue a career in North American freshwater fish ecology*
  *Available for online purchase in May through the OSU Marion Bookstore website.*

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**Available for use at Stone Laboratory**

- Trautman, M.B. 1981. The Fishes of Ohio. The Ohio State University Press, Columbus, OH.