The Ohio State University
2-Day Course Offering at Stone Laboratory
**Summer 2016**
August 8-9 **or** August 10-11

# EEOB 5950: Algae Identification

Semester Credit Hours – 0.5 under/grad; graded Satisfactory/Unsatisfactory
OR may be taken as a Non-Credit Workshop
Offered with Ohio EPA contact hours for certification

**Target Audience:** Students with an interest in the Great Lakes and aquatic ecosystems. Managers or employees of public water supplies (reservoirs, lakes, and rivers). Federal, state, or city employees charged with monitoring water quality.

**Objectives**

A. Identification: Students will learn how to collect and identify algae organisms from Lake Erie and surrounding aquatic ecosystems.
B. Ecology: Students will gain an appreciation of the roles of algae in aquatic ecosystems.
C. Application: Students will assemble a collection of digital images of common algae and learn about the implications of exotic and invasive algal species in the Great Lakes.

**Course Schedule**

**Day One (**8-9 AM is arrival at Research Dock on South Bass Island for transportation to Gibraltar Island; workshop begins at 10 AM**)**

Lecture and discussion

1. What are the algae? How do they fit into the tree of life?
2. What are the habitats and roles of algae in Great Lakes ecosystems?
3. How do we sample this community?

Laboratory

1. Short local field trip to collect algal samples.
2. Getting comfortable with microscopy, keys and identification of plankton.
3. Obtaining an image library of algal specimens.

**Day Two**

Lecture and discussion

1. Toxic algae: what are the species of major concern?
2. Use of algae as indicators of water quality.

Laboratory

1. Examining collections of toxic species (previously collected by the instructor).
2. Examining samples of special interest (if any) brought in by participants.
3. Final summary and discussion; where do we go from here? Outline what continuing resources are available to participants.

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