WILL IT BE YOU?

STONE LAB
THE OHIO STATE UNIVERSITY’S ISLAND CAMPUS ON LAKE ERIE

stonelab.osu.edu

Explore Science + Discover Yourself
Who We Are

MEET STONELAB

ONE DAY. ONE WEEK. FOUR WEEKS. SIX WEEKS.

That’s just how little time it could take for your whole life to change after experiencing Stone Laboratory, The Ohio State University’s island campus on Lake Erie.

For more than 100 years, Stone Lab has been making its mark as a resource for freshwater biology research, science education and outreach. As the research station for the Ohio Sea Grant College Program, the lab is a base for professional scientists from all over the Midwest as they work to solve the most pressing issues facing the Great Lakes, such as invasive species and toxic algal blooms.

Stone Lab’s Gibraltar Island, just off the coast of South Bass Island in Lake Erie, is a full-service campus with dormitories, a dining hall, classrooms, a library and a computer lab. In addition to hosting college-credit courses and resume-building workshops, Stone Lab offers field trips, conference and event center space and public tours of Gibraltar Island, the Aquatic Visitors Center and the South Bass Island Lighthouse, putting Lake Erie science and history within anyone’s grasp.

Two and a half years. That’s how long it takes for a single drop of water entering Lake Erie from the Detroit River to make its way out to Lake Ontario by way of Niagara Falls. That’s when that drop of water, completely unnoticed as it entered the lake, makes a huge splash.
Thousands of Stone Lab alumni are making waves all over the world in biology, environmental sciences and STEM (science, technology, engineering and math) education.

Someone who takes a 2020 Stone Lab class will make an impact in the world.
SMALL ISLAND
BIG IMPACT
Stone Lab is located on Gibraltar Island, just north of South Bass Island’s Put-in-Bay. Gibraltar is named for its resemblance to the famous British fortress at the western end of the Mediterranean Sea. Though it’s no more than a few hundred yards from South Bass, the 6-acre island feels like a whole other world.
GAIN NEW SKILLS

For details, visit go.osu.edu/intro
High school juniors and seniors can earn college credit to get a head start on a degree, and college students can earn general education credits to accelerate their education.

You’ll spend most of your time in the field, not a classroom – while earning two semester credits in one week as you study biology, ecology, plants, birds, insects or even sport fishing. Field studies expand career choices for students with any major.

“Stone Lab allowed me to spend more “class time” in the field doing the things we learn about. I am definitely more prepared for a job in the natural resources field now.”

ANTHONY TAMBINI // forestry, fisheries, and wildlife major, The Ohio State University

Introductory Courses

2 CREDITS
Monday-Sunday. Open to advanced high school students and college students.

June 1–7
EEOB 1930 Introduction to Biological Studies – Aquatic Biology
ENR 2360 Ecology and Conservation of Birds
KNSFHP 1140.05 Lake Erie Sport Fishing

June 8–14
EEOB 1930 Introduction to Biological Studies – Aquatic Biology

EntMLGY 1260 Introductory Insect Field Biology

July 27–August 2
EEOB 1910 Introduction to Biological Studies – Local Plants
EEOB 1930 Introduction to Biological Studies – Aquatic Biology
ENTMLGY 1260 Introductory Insect Field Biology

Need help paying for your class?
See page 14 for info on scholarships.
GET A NEW PERSPECTIVE
Each course is an in-depth experience you’ll share with a handful of classmates as dedicated to the subject as you are.

Ranging from one to six weeks, you’ll be able to earn credits and take required classes for your major while practicing scientific techniques in the field. At Stone Lab, nature is your classroom and Lake Erie is your living laboratory.

Upper-Level Courses

<table>
<thead>
<tr>
<th>SIX-WEEK COURSES (4 CREDITS)</th>
<th>ONE-WEEK COURSES (2 CREDITS)</th>
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<tbody>
<tr>
<td><strong>June 15–July 24</strong></td>
<td><strong>May 17–23</strong></td>
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<tr>
<td>EEOB 3310.01  Evolution</td>
<td>EEOB 5910  Field Herpetology</td>
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<tr>
<td>EEOB 3410  Ecology</td>
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<tr>
<td>EEOB 5420  Aquatic Ecosystems – Ecology of Inland Waters</td>
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<tr>
<td><strong>FOUR-WEEK COURSES (3 CREDITS)</strong></td>
<td><strong>June 8–14</strong></td>
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<td><strong>June 1–26</strong></td>
<td>ENR 3280  Water Quality Management</td>
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<tr>
<td>ENR 3200  Environment and Natural Resources Policy</td>
<td>ENR 5350.01  Taxonomy and Behavior of Aquatic Invertebrates</td>
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<tr>
<td>ENR 5350.01  Taxonomy and Behavior of Aquatic Invertebrates</td>
<td>ENR 3200  Environment and Natural Resources Policy</td>
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<tr>
<td><strong>June 29–July 24</strong></td>
<td><strong>July 27–August 2</strong></td>
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<tr>
<td>ENR 3700  Intro to Spatial Information for Environmental and Natural Resources</td>
<td>EEOB 4950  Field Ecology</td>
</tr>
<tr>
<td>ENR 5350.02  Taxonomy and Behavior of Fishes</td>
<td>FABE 5350  Sustainable Land and Water Systems</td>
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Open to college students and science teachers.
Our Research Experience for Undergraduates Scholarship Program offers an incomparable chance to gain experience as a professional researcher at Stone Lab.
Five Reasons to Apply for a Stone Lab REU

**Participate in hands-on research**
In the lab or in the field, you’re the one observing conditions, collecting data and interpreting your findings.

**Learn from world-class scientists**
The Stone Lab REU supervisors are at the top of their fields. Learn how to use scientific equipment, as well as how to collect and analyze important data, from the pros.

**Make the most of your time**
REUs get free in-state tuition, room and meals. The program runs concurrently with our six-week term and is paired with one of the six-week upper level courses.

**Present your findings**
At the end of the term, you’ll present your research. Many REUs have also written up their results and presented at conferences. Some have even been published in peer-reviewed journals.

**Stand out from the crowd**
Get experience that looks great on a graduate school application or your resume.

Under the guidance of top scientists, our REU students carry out their own research projects from start to finish, including specimen collection, data analysis and a final presentation.

Stone Lab REU alumni have gone on to master’s and PhD programs at colleges across the country and are working scientists in a host of fields.

**2020 REU TOPICS**
- Botany
- Ichthyology
- Ornithology
- Limnology

**Application Deadline**
FEB. 3, 2020

For details, visit go.osu.edu/reu
Not all Stone Lab students are in college. Many are working professionals or those hoping to develop resume-building skills.
**PARTICIPANTS SAY…**

“The entire experience was great, especially with the amount of gear and techniques we were able to learn in such a short time period while still being in a relaxed learning environment. The instructing was great and overall it was a great opportunity that I would recommend to everyone.”

“I learned so much from the classes as well as the networking with others. Staying at Stone Lab for this class does give it a great hands-on approach.”

“I really got a feel for how much we (as an industry) are learning all the time about the algae and their toxins and what we can do to minimize the impact (and what we need to do.) I now have an increased concern and feel a need for a higher level of vigilance in our source water monitoring after learning from the classes and others in the industry.”

Workshop facilitators include staff from state agencies such as the Ohio Department of Natural Resources Division of Wildlife and the Ohio Environmental Protection Agency and the activities are specifically designed to help job seekers get a basic knowledge of common field techniques.

In addition to the offerings listed here, nearly any of our for-credit courses can be taken as a non-credit workshop with permission of the instructor. You can add topics like ecology, fish biology and evolution to your knowledge base while spending most of your time learning outside, getting first-hand experience with the things you’re learning about!

**Stone Lab Workshops**

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<tr>
<th>Date</th>
<th>Workshop</th>
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<tr>
<td>May 29–31</td>
<td>Lake Erie Sport Fishing Workshop</td>
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<td>August 3–4</td>
<td>Algae Identification Workshop</td>
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<td>August 5–6</td>
<td>Dealing with Cyanobacteria, Algal Toxins, and Taste and Odor Compounds</td>
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<tr>
<td>August 11–13</td>
<td>Lake Erie Island Wetland Plant Field Identification and VIBI</td>
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<tr>
<td>October 10–11</td>
<td>Fish-Sampling Techniques Workshop</td>
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For details, visit [go.osu.edu/slworkshops](go.osu.edu/slworkshops)
IT’S POSSIBLE

Because the opportunities at Stone Lab are so valuable, our network of alumni, donors and partners give generously to scholarships to allow as many students as possible to experience a Stone Lab education.

Each year we award more than 80 scholarships to those with superior academic records and financial need. Anyone taking a for-credit class (and some workshops) is eligible to apply. Last year high school students were on average awarded more than $550 and undergraduate students were awarded more than $700.

You’ll indicate your interest in scholarships as you complete the online Stone Lab application. Scholarship applications are due March 1, 2020. Initial recipients will be notified in late March/early April.

Part-Time Jobs

Taking a four- or six-week course? Consider applying for a part-time position as a student lab assistant. On the days you aren’t in class, you’ll work with researchers, help cook and serve meals in the dining hall or assist with programming at the Aquatic Visitors Center and South Bass Island Lighthouse.

Applications for student positions must be received by February 23, 2020. Interviews will be held in early March at the Stone Lab Columbus office.

For details, visit go.osu.edu/studentjobs
HOW MUCH DOES IT COST?

Tuition is charged per credit hour and is based on The Ohio State University tuition. All costs are subject to change. For fees, room and meal costs and updated information, visit go.osu.edu/costs.

FIND US ON SOCIAL MEDIA

stonelaboratory  @stonelab  stonelab  stonelab
LEAD THE NEXT GENERATION

Take any of Stone Lab’s courses (pages 7 and 9) and hone your science skills, learning alongside top Great Lakes scientists.

STONE Lab classes are hands-on and interactive, and get students out in the field for most class days. This isn’t your typical professional development opportunity!

Educators can earn continuing education units or credit toward their advanced degree by taking any of Stone Lab’s courses and workshops. Each course focuses on activities that you can bring back to your classroom to engage your students in scientific discovery and learning.

TEACHERS SAY...

“Stone Lab helped me to become much more focused and deliberate in making real world connections with my students. It has provided a wide variety of resources to help me incorporate Great Lakes literacy principles into the various classes I teach.”

“It was just an amazing week with amazing teachers. As soon as I got home, I thought ‘How can I use this in the classroom to make the students’ education more meaningful and more real?’”

“Stone Lab is different from any other professional development I’ve done and it was exactly what I needed. The class was full of inquiry activities that challenged me to think, and I didn’t realize how much I was learning because I was having so much fun.”

EDUCATOR SCHOLARSHIPS

Educators are eligible for tuition assistance and are encouraged to submit a scholarship application with their course application.

For details, visit go.osu.edu/educators
Each group spends two hours aboard a Lake Erie research vessel collecting data. Afterward, they return to Gibraltar, where they dissect fish and examine the lake’s microorganisms through microscopes.

Groups can choose from up to 10 additional specialized activities to create a one-day trip lasting up to eight hours or a two-day overnight trip, including a stay in the island dormitory and meals at the Dining Hall.

For details, visit go.osu.edu/fieldtrips

Hear directly from a field trip leader at go.osu.edu/fieldtripvid

“The big takeaways for the students are some things that they can do proactively to help combat some of the issues that are affecting the Great Lakes.”

TONY KABEALO // 7th grade science teacher, Phoenix Middle School

FIELD TRIP ACTIVITIES:
- Invertebrate Collection Walk
- Exotic Species Slide Show
- Insect Collecting
- Island Geology Tour
- Herpetology Overview
- Ornithology Hike
- Fish Seining
- Climate Expedition
- Aquatic Visitors Center Tour
- Gibraltar Island Tour

HANDS-ON LEARNING

Students in grades 5-12 or groups of adults (up to 80 people) can make reservations for Lake Erie Science Field Trips in April, May, August, September and October.
DISCOVERY STARTS HERE

Stone Lab’s position in the western basin of Lake Erie has made it an ideal spot for scientists conducting Great Lakes research for more than a century.

As part of world-renowned research university Ohio State, Stone Lab has the connections and well-stocked facilities needed for scientific discovery.

The Water Quality Laboratory allows researchers to identify plankton, measure chlorophyll content and cyanobacterial toxins, analyze organic and inorganic suspended solids, and test for nutrients such as phosphorus and nitrogen. These tests enable scientists to tackle the issue of nutrient loading and harmful algal blooms in Lake Erie better than ever before.

Two cottages near the research laboratory on South Bass Island are available for visiting researchers who are planning overnight stays. Housing is also available on Gibraltar Island and in the Aquatic Visitors Center.

The lab also has several research boats:

- **R/V Gibraltar III**: A 42-foot research vessel for open-lake sampling and has an A-frame for trawling and deploying buoys.
- **M/V BioLab**: A 37-foot trap-net style vessel for near-island sampling and trawling.
- **R/V ErieMonitor**: A 25-foot research vessel ideal for towing underwater equipment and light water sampling.
- **R/V GS-3**: A 28-foot research vessel with an electric winch and davit for medium-sized bottom sampling equipment.

To arrange use of the facility or equipment, contact:

Dr. Justin Chaffin
Research Coordinator
chaffin.46@osu.edu

Available Equipment:

- High-speed centrifuge
- Spectrophotometer
- Fluorometer
- -80˚ C freezer
- Drying oven
- Temperature- and light-controlled incubators
- 96-well plate reader
- Micropipettors ranging from 0.2 microliters to 10 milliliters
- Filter manifolds
- Automated nutrient analyzer
- Flow-through microscope
- Walk-in environmental chamber
- Flow-through lake water
- Multi-sensor sondes
- Water sampling equipment

For details, visit go.osu.edu/researchfacilities
Stone Lab staff can help you incorporate field trip activities such as a sampling cruise on a research vessel, historical tours and other team-building activities.

Stone Lab can accommodate up to 75 people with a conference room that can be set in classroom, theater or U-shaped styles. We also offer indoor and outdoor reception facilities.

Dormitory-style double rooms accommodate up to 40 people for overnight stays. A full-service dining hall provides meals and breaks for guests, if desired.

To book a meeting space, contact:

Kelly Dress  
419-285-1800  
dress.3@osu.edu

Dr. Kristin Stanford  
419-285-1847  
stanford.147@osu.edu

For details, visit go.osu.edu/conferences

MEET ME AT THE LAKE

Secluded meeting spaces on Gibraltar Island offer spectacular views of Lake Erie.
Experience the Greatness of our Great Lake

AQUATIC VISITORS CENTER
go.osu.edu/aquatic
Examine Lake Erie’s ecosystem up close, including live fish. Children under 16 can borrow gear and bait and fish for free off our dock.

SOUTH BASS ISLAND LIGHTHOUSE
go.osu.edu/lighthouse
Scheduled tours are available from April through November. Lighthouse grounds are open to the public daily from dawn to dusk.

GIBRALTAR ISLAND TOURS
go.osu.edu/gibtours
Tours are held each week for up to 70 people on a first-come, first-served basis. Groups tour the island, including Perry’s Lookout, the glacial grooves and the outside of Cooke Castle before learning more about the research being conducted at Stone Lab.

Tours of Stone Lab facilities are available from mid-June through August.
To learn more, visit go.osu.edu/tours