



Introduction to Lakes Online Course

Overview

Inland lakes are complex ecosystems and are impacted by both the people that live near them as well as the water that drains into them. They can provide enormous economic resources to an area but also serve as the center of political disputes. Michigan is blessed with over 11,000 inland lakes, each providing unique recreational, scenic, and environmental benefits. Introduction to Lakes will explore the many dimensions of inland lakes in Michigan—including riparian rights, shorelines, ecology, aquatic plants, citizen involvement, and much more!

The only prerequisite required is a passion for Michigan's 11,000 inland lakes!

Course Outcomes

- Understand the ecological and economic values associated with Michigan's inland lakes
- Recognize inland lake management is multifaceted
- Use federal, state, and local resources to help improve water quality

Course Content

Introduction to Lakes consists of six units. Each unit includes video lectures, facilitated discussion forums, exploratory activities, and a quiz. The highlight of Introduction to Lakes are the video lectures, featuring water resource experts from Michigan State University Extension. The discussion forums give participants opportunity to comment on content and interact with both their classmates and instructors in the course. There are no right or wrong answers - the discussion forums are simply a place to share perspectives and pose questions. Within each unit are activities that reinforce concepts featured in the video lectures. Quizzes are short, concise, and related to content in the videos, discussion forum, and activities. All lecture videos include closed captioning. The course also includes three pre-scheduled live chats, featuring experts on unit topics.

Student Expectations

The Introduction to Lakes course is offered over a six week timeframe. During this time, access will be provided on a week-by-week, unit-by-unit basis with each new unit opening on Tuesdays at 12:00 PM Eastern Standard Time (EST). The course site will be available 24 hours a day, 7 days a week, so you are able to login and work on the assignments at your own pace.

Course instruction will be provided via Michigan State University's Desire2Learn (D2L) course management interface. Each of the six units will take approximately 3-5 hours to complete. It is expected that you will complete all of the course work for the assigned unit per week. Each week a new unit will become available in D2L. You will not have access to all 6 units at once. Your access to proceeding units will be based on completion of the previous unit's quiz. Once a unit is available to view, it will remain open until the end of the course.

The goal of this course is to become more familiar with Michigan's inland lakes and to learn from the instructors, as well as from other classmates. The instructors will not reply to every post in the discussion forums but will be submitting summary responses at the end of each week. It is recommended that you review and respond to other participant discussion forum submissions.

Course Instructors



Bindu Bhakta | Natural Resources Educator, Michigan State University Extension

- B.S., Resource Ecology Management & Anthropology-Zoology, University of Michigan
- M.P.S., Agriculture, Horticulture, Cornell University



Terry Gibb | Natural Resources Educator, Michigan State University Extension

- B.S., Consumer Economics, Wayne State University
- M.S., Teaching Education, Wayne State University



Dr. Jo Latimore | Faculty and Outreach Specialist, MSU Department of Fisheries and Wildlife

- B.A., Biology, Albion College
- M.S., Biological Sciences, University of Notre Dame
- Ph.D., Fisheries & Wildlife, Michigan State University



Jane Herbert | Retired Water Resource Educator, Michigan State University Extension

- B.S., Natural Resources (Fisheries), University of Michigan
- M.S., Agriculture and Extension Education, Michigan State University



Dr. Lois Wolfson | Water Quality Senior Specialist, MSU Department of Fisheries and Wildlife and Institute of Water Research

- M.S., Botany, Michigan State University
- Ph.D., Fisheries and Wildlife (Limnology), Michigan State University



Brad Neumann | Government and Public Policy Educator, Michigan State University Extension

- B.S., Land Use Planning and Economics from Northern Michigan University
- M.S., Natural Resource Economics and Policy from the University of Maine



Beth Clawson | Natural Resources Educator, Michigan State University Extension

- B.S. Natural Resources Water Quality/Environmental Studies - Grand Valley State University
- M.Sc.A. Administration- Central Michigan University

Course Schedule

Week	Topic	Description
1	Lake Ecology	Analysis of factors that influence lake ecosystems and exploration of basic lake functions
2	Watersheds	Primer on the water cycle, hydrologic features of a watershed, and land use practices and implications for water quality
3	Shorelines	Review of shoreline features and functions in inland lake ecosystems and shoreline practices to protect water quality
4	Water Law	Summary of federal, state, and local laws regarding riparian rights, navigability, and permitting on inland lakes in Michigan
5	Aquatic Plants	Introduction to plant identification, short and long term management techniques, and regulations regarding aquatic vegetation in Michigan lakes
6	Citizen Involvement	Review of institutions involved in lake management, coordinating with other lake groups, and components of a lake management plan
Live Chats		
Week 2		Lake ecology and watershed management
Week 4		Natural shorelines and Michigan water law
Week 6		Aquatic plants and citizen involvement

Course Requirements

To receive a certificate of completion you are required to watch all video lectures and complete all of the assigned activities. You are expected to attend and participate in the live chat sessions. However if you are unable to attend due to unforeseen circumstances, a recording will be available. An 80% or higher score is required for each unit quiz. Note that you will have the opportunity to retake quizzes.

Technology Requirements

The course will contain links to other websites and documents, some of which are in PDF format. It is recommended that you have the latest version of [Adobe Acrobat Reader](#) installed on your computer. You should have a high-speed internet connection and close all other windows and programs prior to entering the course. The course utilizes Michigan State University's Desire2Learn interface and it is recommended you perform a systems check to ensure the necessary software is on your computer. You can complete this check by visiting: [MSU D2L Systems Check](#). The live chats utilize Zoom, a video conferencing service.

Instructions on how to download and use Zoom can be found in the "Getting Started" section of the course.

Contacting the Instructors

If you have questions for the instructors of this course, use the "Questions for the Instructors" discussion forum in the "Getting Started" section of D2L. Email Bindu Bhakta at bhaktabi@msu.edu with questions about gaining access to course materials. For troubleshooting issues with the D2L software please contact the MSU Help Desk at <http://help.d2l.msu.edu> or call 1(800) 500-1554.

Course Policies

- **Your participation:** It is expected that for each unit, you will watch the video lectures, participate actively in discussion forums, complete all activities, and score an 80% or higher on all unit quizzes. If you do not complete these assignments, you will not receive a certificate of completion.
- **Interaction from instructors:** The self-paced, online nature of this course allows for online communication with course instructors through facilitated discussion forums as well as three pre-scheduled live chat sessions.
- **Desire2Learn Code of Conduct:** MSU expects that you will respect the rights of faculty and other students as you participate in the educational process. Participating in a D2L course means that you may have access to personal information and academic work produced by other students and faculty members, such as discussion board postings, drafts of papers and other work produced in the course. Academic norms and MSU policy require that you must not reveal any information about classmates, course work content, or its authors to anyone outside the course.

Students should be aware that their use of D2L materials and communication tools in a particular course may be observed and recorded by the instructor of that course. These observations and records may include a student's access to online library materials linked through the D2L course website. Use of these observations and records must conform to the use and release of confidential student records as described in Michigan State University's [Access to Student Information](#).