



Iowa's Geologic History: Rocks and Fossils Workshop

for Teachers & Naturalists

Spring and Summer 2026

Can you D|G it?

Earn two units of graduate credit and learn about lowa's environmental resources through an activity-based short course (EARTHSCI 6233 lowa's Environmental Resources for Teachers) through the University of Northern Iowa. This year's focus: Iowa's Rock and Fossil records and their importance to Iowa's limestone industry.

The course begins with online content development in the Spring to prepare you for the hands-on workshop visiting various environmental sites and preparing curricular materials in June.

- Develop geological to fossil collections while obtaining a basic proficiency in their identification.
- Focus on the significance of these items in understanding and interpreting Earth's history and the geology of lowa.
- Learn of the various economic and environmental aspects of lowa geology.

Network with fellow geology educators

Participate in several exciting, hands-on activities in the field, and meet other Earth Science teachers from across the state. Discuss what's working and what's not in your classrooms and share your tried-and-true methods for teaching about the geology of lowa.



SPONSORED BY

The IOWA LIMESTONE PRODUCERS ASSOCIATION, in conjunction with the UNI Department of Earth and Environmental Sciences, with assistance from the Iowa Department of Natural Resources.

WORKSHOP DETAILS

Schedule

The **online component** of this workshop is offered via synchronous or asynchronous video conferencing (Panopto and/or Zoom) **Tuesdays** from **4 to 6 p.m., March 31 and April 7 & 21**, through a series of two-hour classes covering the environmental and geochemical principles of geology in lowa.

The on-campus component begins at 8:30 a.m. on Tuesday, June 23, with a reception and check-in on the University of Northern Iowa campus. The workshop ends at approximately 4 p.m. on Thursday, June 25.

Each day begins with announcements and an overview of the day's activities. There may also be evening sessions, which consist of special presentations, laboratory work and/ or a review of the day's activities. This is an intensive course, and everyone is expected to participate in all workshop sessions.

Applications will be accepted on a first-come, first-served basis. All applicants will be notified on or before March 11. The course is capped at 14 participants.

Course participants will learn through applied fieldwork, interacting with industry experts and scientists, completing environmental lab activities and peer-to-peer discussions.

Housing

Students who desire housing on the University of Northern lowa campus should notify Dr. Heinzel, who will help you make arrangements. Housing is air-conditioned. (Housing and most meal costs are covered by the lowa Limestone Producers Association).

Cost

Due to the generous support of the **lowa Limestone Producers Association** (*ILPA*) we are able to offer this workshop for a \$200 registration fee, plus a technology fee of \$38 (billed upon acceptance). This includes two units of UNI graduate credit, on-campus housing, most meals, transportation in the field and instructional costs.

Cancellations

If your plans change and you must cancel, please contact UNI Online & Distance Education at 319-273-7206 as soon as possible so we may allow those on the waiting list the opportunity to attend. Cancellations must be received no later than **March 18, 2026,** in order to receive a full refund of the \$200 registration fee.

Further information

SCHEDULES AND FIELD TRIPS

Chad Heinzel, Professor

Workshop Leader UNI Department of Earth and Environmental Sciences

Phone319-273-6168 Email chad.heinzel@uni.edu

REGISTRATION AND BILLING

Janelle Finke

UNI Online & Distance Education

Phone319-273-7740 Emailjanelle.finke@uni.edu

SPONSORS

Iowa Limestone Producers Association 515-262-8668 **IOWA LIMESTONE**

www.limestone.org

UNI Department of Earth and Environmental Sciences 319-273-2759

www.earth.uni.edu

Iowa Geological Survey

319-335-1575 www.iihr.uiowa.edu/igs







Iowa's Fossil Record for Teachers & Naturalists

WORKSHOP APPLICATION

APPLY NOW!

Class size is limited to 14 participants.

Submit this form via:

Online application

online.uni.edu/iowafossils

Mail

Iowa's Environmental Workshop Online & Distance Education University of Northern Iowa HPC 106 Cedar Falls, IA 50614-0223

Application Deadline:

March 11, 2026 Applications will be accepted as received. Course may fill before deadline.

Acceptance:

Applicants will be notified shortly after receipt of all application materials – or no later than March 11 – and invited to enroll in the course.

*Please note: the workshop size is limited to 14 teachers. You are encouraged to apply early, as spots fill quickly.

Email

Home Address

Home City Home State Home Zip

Home Phone

School School District

School Address

School State School Zip

School Phone

Check here if you have applied for this workshop in the past.

How many years have you been teaching?

What subjects and grade levels have you taught / do you teach?

Why do you think this workshop would be beneficial to you?



Please list any current teaching endorsements.

TOPICS AND ACTIVITIES

History

- Processes at work in the formation of lowa's rock and fossil records
- Characterization of lowa's natural resources: minerals rocks, and fossils
- Collection and classification of minerals, rocks and fossils

Processes and Principles

- · Fossil preservation, identification and applications
- Field activities as classroom events; taking students to the field for learning activities
- Sand, gravel and aggregates from the ground to improvements in your life, "If you cannot grow it, then you have to mine it"

Geology and Land Use

- Role of fossils in understanding lowa's geologic history, energy potential and aggregate production
- · Landfills and waste management issues
- Sustainable urban versus rural development
- Resource conservation, management and hazards

Geochemistry

- Apply chemistry to lowa's natural resources to identify challenges and opportunities
- Explore and use UNI's analytical tools including: XRD, XRF and ICP-MS

Science Education

- Explore effective ways to meet Earth Science to Environmental NGSS and Iowa Core Standards
- Best-practices for Place-based learning techniques and opportunities
- Network with your local quarry, sand-pit and water resource professionals for future student field trips
- · Learn about quarry and laboratory safety procedures







The aggregation of preparation, time on tasks, assignments and interactions of this work reflects the rigor and expectation equivalent to 15 hours of direct faculty instruction and a minimum of 30 hours of out-of-class student work for each credit awarded