Great Lakes Investigations
Teacher Institute
July 14-18, 2014

About the Course

The Institute is designed to teach educators about the physical, chemical, and biological components of the Great Lakes ecosystem using Lake Superior as the classroom. This 5-day course will enhance the ability of educators to teach about Great Lakes topics including watershed dynamics, stream and lake assessments, amphibian monitoring, wetlands, environmental stewardship, analyzing Great Lakes data, building school community partnerships, and environmental careers. Mathematics; life, earth and physical sciences; technology; and social studies will be woven into the course content.

The Institute will take place at Michigan Tech’s new Great Lakes Research Center on the Portage Waterway with state of the art facilities that support chemical, physical and biological research on the Great Lakes and aquatic ecosystems.

Institute participants will engage in hands-on data collection and analysis, field trips, lab experiences, and discussions with research scientists. Participants will take a ½ day trip on Lake Superior and the Portage Waterway aboard Michigan Tech’s research vessel, Agassiz, to sample water chemistry, zooplankton, phytoplankton, sediment, and benthic organisms. They will investigate wetland biodiversity, study the impact of aquatic exotics on the Great Lakes and inland lakes, and explore why amphibians are bioindicators of environmental health. In addition, participants will use the Earth Force curriculum to explore a framework for engaging their students in environmental stewardship projects.

Funding provided by:
National Science Foundation
Earth Force & National Oceanographic & Atmospheric Administration
Michigan Tech Center for Water & Society

Coordinated by the Western UP Center for Science, Math & Environmental Education and Michigan Technological University
Cost
Cost for the 5-day Institute is $295 off campus (includes 2 graduate credits, 5 lunches, and instructional materials) and $495 on campus which includes five nights lodging and meals. [Generous support from the National Science Foundation and Michigan Tech Center for Water and Society has reduced the cost of MTU tuition (official 2013/14 MTU Applied Science Education Graduate Tuition for Residents/Non-Residents is $514 per credit)]. Payment of the full registration fee is due by June 2nd. Pay by credit card by calling MTU Cashier at 906-487-2247.

Credit
Michigan Tech University faculty and expert educators will present the sessions. To receive credit, participants develop a 5-day teaching unit after the institute due September 8, 2014.

Financial Aid
The Michigan Space Grant Consortium K-12 Educator Incentive Program will provide up to $400 for Michigan teachers to attend workshops on math and science. For an application: http://mi.spacegrant.org/

How to Apply (deadline June 2nd)
Complete teacher institute application online: http://wupcenter.mtu.edu/

How to Register for MTU credit
http://www.mtu.edu/gradschool/admissions/apply/ and upload your current teaching certificate.

Questions, contact:
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For More Information:
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Accommodations
Participants will receive five nights lodging in MTU’s new Hillside Place Residence Hall in a single room with shared bath and receive all of their meals from Michigan Technological University campus on the Portage Waterway.

Getting to Michigan Tech
Michigan Technological University is located east of downtown Houghton, MI (pop. 7,000). United Airlines (800.241.6522 or www.united.com) is the sole airline serving Houghton with 2 flights daily from Chicago to the Houghton County Airport. Taxi service is available from the airport to Michigan Tech’s campus for about $20 per person by calling Copper Country Limo & Taxi at 906.482.4761.

City of Houghton
Houghton is an historic town with roots in the copper mining days of the mid-19th century. Hiking and mountain biking are easily accessible at the nearby MTU Recreational Trail System, or stroll along Houghton’s waterfront, or Lake Superior at McLain State Park. Learn more about MTU: http://www.mtu.edu or Keweenaw Tourism