

Michigan Tech

Michigan Technological University

Includes 3 credits
\$150 per participant OFF CAMPUS
\$375 per participant ON CAMPUS

Great Lakes Investigations Teacher Institute

June 15-19, 2009

Application Deadline: Friday, May 15, 2009 ~ 20 spaces

About the Course

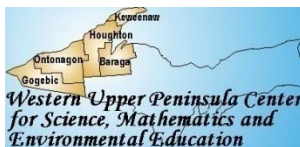
This Institute is designed to teach educators about the physical, chemical, and biological components of the Great Lakes ecosystem, using Lake Superior as the classroom. This 5-day course is designed to enhance the ability of educators to teach about Great Lakes topics including watershed dynamics, stream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

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 Portage Waterway aboard Michigan Tech's research vessel, *Agassiz*, to sample water chemistry, zooplankton, phytoplankton, sediment, and benthic organisms. Participants will discover how toxins move between the water and air, study the impact of aquatic exotics on the Great Lakes, and sample frogs and salamanders as bioindicators of environmental health. Michigan Tech University faculty will present many of the sessions.



Course Credit

Participants may enroll for 3 graduate credits from MTU. To receive credit, participants must develop a 5-day teaching unit due Sept. 1, 2009.



Funding made possible by the Michigan Coastal Management Program of the Michigan Dept. of Environmental Quality through a grant from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce

Sponsored by the Western Upper Peninsula Center for Science, Mathematics and Environmental Education in partnership with Michigan Technological University

Cost

Cost per participant for the 5-day Institute is *only* **\$375** for both Michigan and out-of-state participants which includes 5 nights lodging, meals, field trips, instructional materials, and 3 graduate credits from Michigan Tech University. Cost to participants staying off campus is **\$150**. (The actual cost of the Institute is \$1800. A grant from the Michigan Coastal Management Program of the Michigan Department of Environmental Quality through a grant from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, along with a departmental stipend from the Michigan Tech Departments of Civil and Environmental Engineering and Cognitive & Learning Sciences, reduces the official 2008/09 MTU Graduate Resident and Non-Resident tuition of \$391 per credit). Payment of the full registration fee is due Friday, June 5. **Make checks payable to: Copper Country ISD.**

Financial Aid

Applicants who are K-12 teachers in the eight Great Lakes states may apply for a Marine Immersion scholarship through the COSEE Great Lakes program <http://coseegreatlakes.net/> or contact Helen Domske hmd4@cornell.edu

Getting to Michigan Tech

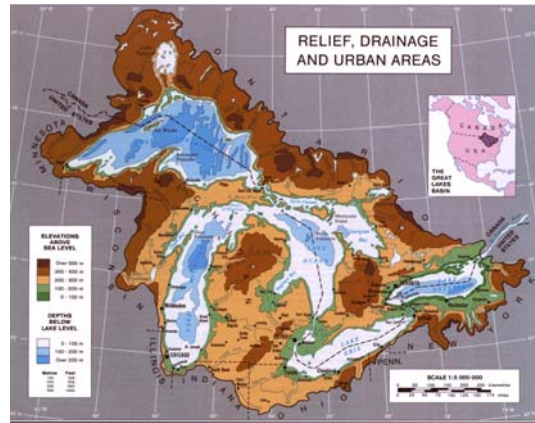
Michigan Technological University is located just east of downtown Houghton, MI (pop. 7,000). Houghton is served daily by Northwest Airlines (800) 225-2525 or nwa.com) from Minneapolis to the Houghton County Airport in Hancock. Taxi service is available from the airport to Michigan Tech's campus for about \$20 per person by calling Neil's Taxi Service at 906-482-5515.

Houghton, Michigan is a quaint town with roots in the historic copper mining days of the mid-19th century. Hiking and mountain biking is awesome at the nearby Michigan Tech Recreational Trail System, or stroll along Lake Superior at McLain State Park, or visit a nearby nature sanctuary. Learn more about MTU: <http://www.mtu.edu> or Keweenaw Tourism information: www.thekeweenaw.com

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To Apply/More Information

Application forms and updated information available at: <http://wupcenter.mtu.edu>

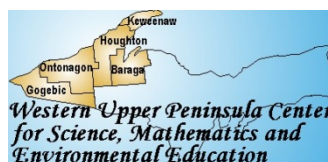
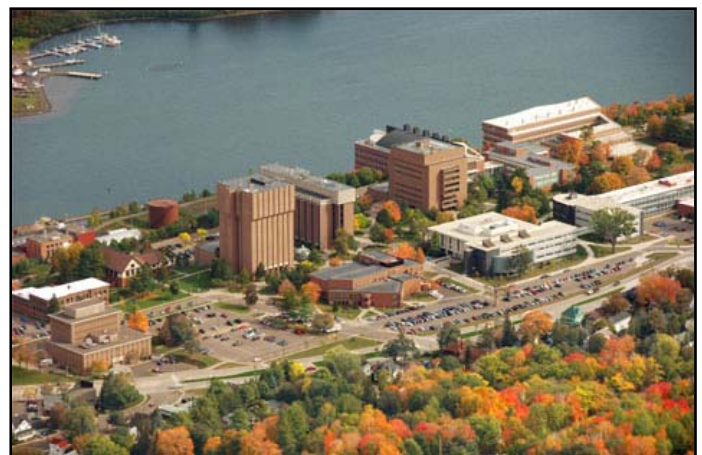
Application deadline is: Friday, May 15

Submit applications to:

Joan Chadde, Institute Coordinator
Western U.P. Center for Science, Math &
Environmental Education
105 Dilman Hall -Michigan Tech University
1400 Townsend Dr., Houghton, MI 49931
Tel: 906-487-3341 Fax: 906-487-1620
Email: jchadde@mtu.edu

Accommodations

Participants will receive five nights lodging in MTU's newly remodeled Wadsworth Hall in a single room with private bath and receive all of their meals from Monday breakfast through Friday lunch. Michigan Tech Trails and downtown Houghton are within easy walking distance.



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