



Great Lakes Maritime Research Institute

A University of Wisconsin - Superior and University of Minnesota Duluth Consortium

Michigan Tech

Great Lakes Maritime Transportation Teacher Institute

Only \$450
includes lodging/meals
and 2 credits

July 30-Aug. 3, 2007 (west-end of Lake Superior)

Application Deadline: Friday, May 25, 2007 ~ 20 spaces available!

About the Course

Explore the historical, economical and environmental aspects of Great Lakes shipping at the "head of the lakes." Based in Duluth, participants will tour the Duluth-Superior harbor, Minnesota north shore, and meet with industry to better understand the various cargoes shipped, and how it is managed and regulated. The institute will provide unique learning experiences and the opportunity to share with fellow educators. The goal of the Institute is to provide participating teachers with a foundation in maritime transportation---history, current operations, and future challenges.

2006 participants had this to say:

- The field trips were powerful!
- Daily presentations were awesome.
- The institute helped me understand the way maritime transportation works and how it fits into our life.
- I was impressed with the wide variety of site visits that included all facets of the shipping industry from the arrival of goods by rail and port safety, to the shipping of goods to other Great Lake ports and global destinations.

Course Credit

Participants may enroll for 2 semester credits from MTU. To receive credit, participants must: develop two new lessons which are due August 31, 2007.



Tentative Schedule

Monday-Friday, July 30-August 3, 2007

Sunday, July 30

- Course overview (evening)

Monday, July 30

- Duluth Seaway Port Authority
- Harbor tour aboard *Vista Queen* at Barker's Island
- S.S. William A. Irvin
- **Great Lakes Aquarium**

Tuesday, July 31

- Tour iron ore mine & processing facility (Hibbing, MN)
- Coast Guard facility
- U.S. Army Corps Maritime Museum

Wednesday, August 1

- Canadian National Ore Dock (Two Harbors, MN)
- *Edna G. Tugboat* tour
- Split Rock Lighthouse

Thursday, August 2

- Midwest Energy Coal transition point (Superior, WI)
- Burlington Northern Taconite Facility & Ore Docks
- Balancing Social, Economic & Environmental Aspects of Great Lakes Shipping

Friday, August 3

- Lake Superior Warehousing Company
- Murphy Oil

This institute is made possible with a grant from the Great Lakes Maritime Research Institute (<http://www.glmri.org>)

Co-Sponsors and Contributors include:

- ♦ University of Wisconsin-Superior ♦ Michigan Tech University Transportation Institute
- ♦ Western Upper Peninsula Center for Science, Mathematics and Environmental Education
- ♦ Michigan Tech Center for Water and Society ♦ Minnesota/Wisconsin Seagrant ♦ Duluth Seaway Port Authority

General Information

Cost

The institute registration fee is only \$450 and includes five nights lodging, most meals, travel during the institute, two Michigan Tech University graduate credits (optional), classroom materials, and all admission fees. An MTU departmental stipend is provided that significantly reduces MTU tuition costs. (For comparison, 2005/06 MTU tuition rates *per credit* were: Undergraduate Resident \$252, Undergraduate Non-Resident \$625, Graduate Resident or Non-Resident \$468, and Applied Science Education Graduate Resident or Non-Resident \$323). Full payment is due by June 30. Refunds will be provided if the space is filled.

Participants will be eligible to receive \$100-\$250 for post-institute professional conference presentations, community outreach activities, or journal articles on teaching about Great Lakes transportation.

Financial Aid

Applicants who are K-12 teachers may apply for a scholarship through the COSEE Great Lakes program <http://coseegreatlakes.net/> (click on Marine Immersion) administered by the Great Lakes Sea Grant Program or contact Robin Goettel (goettel@uiuc.edu).

To Apply/More Information

Application forms and updated information available at: <http://wupcenter.mtu.edu>
The application deadline is: Friday, May 25.

Submit applications to:

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

**\$450 Registration includes lodging,
most meals, transportation,
and 2 credits!**

Michigan Tech



Accommodations

Participants will stay in a hotel for five nights, Sunday-Thursday nights, in downtown Duluth, and eat most meals with the group.

Transportation

All transportation to sites *during* the institute will be provided. Participants may travel by Michigan Tech van from Houghton to Duluth on Sunday, or meet at University of Minnesota Duluth.

