Institute Topics:

- Tree ID & Forest Measurements
- Forest Soils & Watershed Management
- Forest Ecology and Conservation Biology
- Forest Insects & Disease
- Wildlife Ecology
- Forest Management & Silvicultural Prescriptions

Application Deadline: Friday, April 2, 2004

Only 25 spaces available!

This Institute is made possible with a grant from the Michigan Forest Foundation

Coordinated by:
Michigan Technological University School of Forest Resources & Environmental Science
Western Upper Peninsula Center for Science, Mathematics and Environmental Education
About the Institute

This intensive, interactive six-day Institute is designed to provide grades 4-12 teachers with the basic understanding of forest resources, ecology, and management, as well as current issues in forest management. Topics to be addressed during the Institute include: identification of common trees, forest measurements, soils, watershed management, forest and wildlife ecology, forest insects and disease, forest management and silvicultural prescriptions, and conservation biology. At the end of the Institute, participants should feel confident teaching their students about the ecology and management of Michigan’s forests.

Michigan Technological University (MTU) brings together the expertise and experience of university faculty, scientists, natural resource management professionals, and educators to conduct this Institute. Through lecture, hands-on data collection and analysis, field trip experiences, technology applications, and assignments, participants will obtain new knowledge and skills that can be adapted to their work with students. The Institute will offer standards-based teaching ideas that participants can incorporate into their classroom curriculum, opportunities for real-world, inquiry-based experiences, and time to share best teaching ideas with their peers.

Teachers will receive approximately $200 of curriculum support materials (activity guides, ID books, forest measurement tools) to assist them in the development and implementation of a forestry-related teaching unit that addresses Michigan (or national) Content Standards for Science, Mathematics, and Social Studies.

Additionally, participants will gain a sense of forest stewardship—by better understanding how human activities interact with forest distribution and health. Participants will enhance their teaching skills—by sharing ideas and innovative approaches to curriculum development and delivery with other educators; and participants will be better able to guide their students’ interest in natural resource careers after spending an entire week interacting with a wide variety of scientists and natural resource professionals.

About MTU’s Ford Forestry Center

The Ford Forestry Center (FFC) is located 40 miles south of Michigan Tech’s campus in Houghton, and 9 miles south of L’Anse on US 41. The Center is a 4,547 acre facility used for research and education pursuant to the overall mission of the School. Facilities include a modern 50-room dormitory and dining hall, four classrooms, a computer lab, and a large conference room. The Center also includes many miles of hiking, biking, skiing and snowshoeing trails, as well as, canoeing on nearby Ford Lake. The Center is one mile from the spectacular Canyon Falls of the Sturgeon River. To learn more: http://forest.mtu.edu
Course Credit & Requirements

Participants who satisfy all course requirements will earn 3.0 semester hours of graduate credit from Michigan Technological University. Participants are expected to actively engage in all learning activities during the Institute, including lecture, field trips, and evening programs. Prior to the Institute, participants will receive a reference list and are expected to begin formulating an idea for a new forestry-related teaching unit that they will present on the first day of the Institute. During the Institute, participants will keep a field journal. After the Institute, participants will design a teaching unit on a topic of interest related to forestry that reflects effective teaching strategies and meets Michigan (or national) content standards. Participants should plan to implement the unit during Fall 2004. The teaching unit is due August 31, 2004.

Professional Education

The credits earned from this Institute can be applied towards an 18 semester-hour planned course of study for teachers working toward their Michigan Professional Certificate. Graduate credits may also be applied towards MTU’s Master of Science in Applied Science Education program. For more information about designing a planned course of study or the Master’s program, contact Dr. Bradley Baltensperger at 906-487-2460 or brad@mtu.edu. Participants interested in pursuing an advanced degree at Michigan Tech in a field other than education, should contact the department of interest (http://www.mtu.edu/) and inquire about the applicability of credits earned in this Institute.

Institute Instructors

The institute will be taught by MTU School of Forest Resources and Environmental Science (SFRES) faculty and staff, master teachers, and natural resource management professionals.

Invited School of Forest Resources & Environmental Science Faculty & Staff

( go to the SFRES web page http://forest.mtu.edu/ to learn more about these faculty members):

Dr. Andy Burton – forest measurements and silviculture
Dr. David Flaspohler – ornithology and conservation biology
Michael Hyslop – geomorphology, geographic information systems
Dr. Marty Jurgensen – forest soils, nutrient cycling, and acid rain impacts on forests
Dr. Linda Nagel – ecophysiology, silviculture, forest vegetation dynamics
Dr. Kurt Pregitzer - silviculture
Jim Schmierer/Scott Noble - applied forest management
Andrew Storer - forest pathology and entomology
Dr. John Vucetich/Dr. Leah Vucetich/Dr. Rolf Peterson/Joe Kaplan – wildlife ecology and management

Invited Guest Presenters:

Representatives of Michigan Forest Foundation, DNR, USFS, Mead-Westvaco, U.P. Environmental Coalition, and The Nature Conservancy

Course Coordinator

Joan Schumaker-Chadde, Program Coordinator, Western Upper Peninsula Center for Science, Mathematics and Environmental Education at Michigan Technological University
General Information

Cost
Registration fee for the 6-day Institute is $400, which includes room, meals, field trips, instructional materials, and three graduate credits from Michigan Tech University. (The total cost of the Institute is $800, plus $681 for tuition for 3 graduate credits. Generous support from the Michigan Forest Foundation, along with a departmental stipend, reduces total participant cost to only $400 for both Michigan and out-of-state participants. Payment of the full registration fee is due by Tuesday, June 1st. Make checks payable to ‘Michigan Technological University.’

Location and Accommodations
The Upper Peninsula forests of maple, cedar, jack pine, spruce, fir, and aspen will provide the ideal scientific and natural setting for this exciting learning opportunity. Participants will live at MTU’s Ford Forestry Center for the entire week. Participants will share a double room and bath, and receive all of their meals.

Transportation
Michigan Technological University in Houghton, MI is served daily by Northwest Airlines from Minneapolis through the Houghton County Memorial Airport in Hancock. The nationwide reservations number for Northwest is 800-225-2525, or visit the Northwest website: www.nwa.com Commercial taxi service is available from the airport to the Ford Forestry Center for a cost of approximately $50 per person. To arrange a taxi, contact Neil’s Taxi Service at 906-482-5515.

Websites for More Information
School of Forest Resources & Environmental Science at Michigan Tech: http://forest.mtu.edu
Michigan Technological University: www.mtu.edu
Western UP Center for Science, Mathematics & Environmental Education: www.wupcenter.mtu.edu
Tourism information: www.thekeweenaw.com

Questions
For more information, contact Joan Schumaker-Chadde at 906-487-3341 or jchadde@mtu.edu

How to Apply
Send completed applications by email or postal mail to:
Joan Schumaker-Chadde, Course Coordinator
Western U.P. Center for Science, Math & Environ. Education
105 Dillman Hall
Michigan Technological University
1400 Townsend Dr., Houghton, MI 49931
Tel: 906-487-3341 Fax: 906-487-1620

Application forms are available on the web at:
http://forest.mtu.edu
http://wupcenter.mtu.edu
http://www.ed.mtu.edu/pd.html

Application deadline is Friday, April 2nd. Participant selection is based on applicants’ thoughtful responses to the questions on the application. Participants will be notified by email by Friday, April 16 as to whether they are selected to participate in the Institute. Enrollment is limited to 25 participants.

Earn 3 more MTU graduate credits! Attend the Ecology of the Great Lakes Teacher Institute aboard the EPA research vessel Lake Guardian July 5-10, 2004. Application forms and information are available by contacting jchadde@mtu.edu or http://wupcenter.mtu.edu.