

Teaching About Global Change

Summer Institute for Grade 4-12 Teachers

June 20-24, 2016

APPLICATION DEADLINE:

May 2, 2016

**Cost: \$400 off campus
\$700 on campus**

- ◇ **Off campus includes**
2 graduate credits, 5 lunches,
field trips, classroom supplies
- ◇ **On campus also includes**
5 nights lodging in MTU's
Hillside Place and all meals
- ◇ **Payment due:** May 16, 2016

Register online:

[2016 Global Change Teacher
Institute Application](#)

or www.wupcenter.mtu.edu

For More Information:

Joan Chadde, Course Coordinator
Tel: 906.487.3341
Email: jchadde@mtu.edu

What You Will Gain

- ◆ This 5-day Institute will prepare educators to engage middle and high school students in a real-world study of the effects of global change on ecosystems, including the impacts of climate change, elevated carbon dioxide and ozone levels, nitrogen saturation, acid rain, and invasive species.
- ◆ Through lecture, hands-on data collection and field trips, participants will interact with scientists and gain new knowledge and skills.
- ◆ Teachers will be trained in and receive the *Michigan Environmental Education Curriculum Support (MEECS) Climate Science & Impact Unit* (easily adapted to other states). National and Michigan science standards will be addressed.
- ◆ Visit long-term field research locations that monitor the impacts of nitrogen deposition and climatic variability on forest growth, examine the effects of experimental warming on northern ecosystems, and tour subterranean rhizotron research facility where scientists study soil carbon sequestration.
- ◆ Opportunity to interact and collaborate with teachers from across Michigan, the Midwest and U.S.

Learn from the Experts

The Institute will be taught by internationally-recognized researchers from Michigan Tech University's School of Forest Resources and Environmental Sciences, along with scientists from the USDA Forest Service's Northern Institute of Applied Climate Science, USDA Forest Service Northern Research Station and expert teachers.



Creating a mini-peatcosm at USDA Research Station.

Conducted by the Ecosystem Science Center of the School of Forest Resources & Environmental Science at Michigan Tech.
Coordinated by the Michigan Tech Center for Science and Environmental Outreach.

Course Credit & Requirements

Participants will earn 2 graduate credits (ED5641) from Michigan Technological University. Course requirements:

- ◇ Complete pre-course readings and reflections.
- ◇ Participate fully in all parts of the Institute.
- ◇ *Develop a 5-day teaching unit after the institute that includes five lessons* related to global change (using the rubric provided) and that meets applicable content expectations. Participants should plan to implement the unit during the 2016-17 school year.

Due September 6, 2016.

Master of Applied Science Education

The credits earned from this institute can be applied to a planned course of study for teachers working towards their Professional Certificate or a Master of Science in Applied Science Education at Michigan Tech.



Michigan Technological University campus

Getting to Michigan Tech

Michigan Technological University is located in Houghton, MI (pop. 7,000). United Airlines is the sole airline serving Houghton (800.241.6522 or www.united.com) with two flights daily from Chicago. Taxi service is available by calling Copper Country Limo & Taxi at 906.482.4761.

How to Apply

Complete teacher institute application online:

[2016 Global Change Teacher Institute Application](#)

OR <http://wupcenter.mtu.edu/Application>

Application Deadline: May 2, 2016

After acceptance into course, participants will receive information via email on how to enroll for Michigan Tech credits from:

Teacher Professional Development
Cognitive & Learning Sciences
Michigan Technological University
Tel: 906-487-2460
Email: teacherpd@mtu.edu

Accommodations

Participants staying on campus will stay in single rooms with private baths in Michigan Tech's new Hillside Place. Meals are all you can eat and cater to many dietary needs. Participants are within easy walking distance to downtown Houghton and Michigan Tech hiking and biking trails.

Find out more about Michigan Tech at <http://www.mtu.edu/>



Looking for invasive earthworms

Cost*

\$400 off campus which includes 2 graduate credits, 5 lunches, field trips, and classroom supplies, or **\$700 on campus** which also includes 5 nights lodging and meals (Monday breakfast through Friday lunch).

* A stipend provided by the Kinship Foundation to Michigan Tech helps to reduce official Michigan Tech tuition for teachers with proof of current certification (2015/16 official Applied Science Education Graduate Resident and Non-Resident tuition is \$561 per credit).

Payment due May 16, 2016. Pay by credit card by calling MTU Cashier at 906.487.2247.

Payments are non-refundable.

Additional Financial Aid

Teachers may apply for Michigan Space Grant Consortium K-12 Educator Incentive Program funds for up to \$400 to attend workshops on math and science. To apply: <http://mi.spacegrant.org>



Taking it back to the classroom.