TEACHER PROFESSIONAL DEVELOPMENT  Spring/Summer 2005

Course registration:  Lori Witting (lori@mtu.edu; 906-487-2263)
Information on M. S. in Applied Science Education:  Dr. Bradley Baltensperger (brad@mtu.edu; 906-487-2460)
Check our website for updates:  http://www.ed.mtu.edu/

SPRING 2005
Science Learning Materials and Inquiry (ONLINE)  Identification, selection, and evaluation of materials.  1 cr.
Assessing Science Learning (ONLINE)  Alternative and authentic assessment techniques to ensure consistency, reliability, and fairness in evaluating science learning.  1 cr.

SUMMER 2005
Geology of Utah’s National Parks ~ TBA  14-day field course in the National Parks and Monuments of eastern Utah. Teachers will learn how climate and mountain-building events change landscapes through time. The Institute mostly focuses on geology, but also emphasizes teaching and learning.  4 cr.  GE 5130
Exploring Mathematics through Engineering Applications ~ June 28-July 1. Participants address development of 3-D spatial skills, geometry, truss analysis, and programmable logic controllers to build knowledge in weak areas of mathematics through problem-solving. Core course in M.S. in Applied Science Education. 2 cr.  ENG 5101
Exploring Science through Engineering Applications ~ June 21-26. Participants engage in lab and field work studying water quality assessment using Palm-based laboratories and scanning electron microscopes to build student skills in earth and physical sciences. Core course in M.S. in Applied Science Education.  ENG 5301  2 cr.
Ecology of Isle Royale ~ TBA. This one-week camping experience on Isle Royale National Park will explore ecological concepts and interrelationships between plants, animals, geology, climate and humans. 3 cr.  ED 5560

SPRING 2005
Science Learning Materials & Inquiry (ONLINE)  Identification, selection and evaluation of materials. 1 cr.
Assessing Science Learning (ONLINE)  Alternative and authentic assessment techniques to ensure consistency, reliability, fairness in evaluating science learning. 1 cr.

Engineering Applications in the Earth Sciences ~ June 28-July 1 and July 11-16. A two-week intensive course that focuses on how engineers use principles from the earth sciences to solve problems and design systems. Core course in M.S. in Applied Science Education. 4 cr.  ENG 5300
Global Change Institute for Teachers ~ July 11-16 Engage middle/high school students in real-world study of global climate change and its effects on ecosystems. Participate in on-going research alongside MTU scientists. Participants stay at MTU’s Ford Forestry Center.  3 cr.  FW 5641/ED 5641
Engineering Applications in the Physical Sciences ~ July 18-29. This two-week intensive course demonstrates how engineers use principles from the physical sciences to solve problems and design systems. A core course in the Master’s program in Applied Science Education.  4 cr.  ENG 5200
Forest Resources & Environmental Sciences ~ June 27-July 2. Examine the forest community types, ecology, insects and disease, wildlife habitat suitability, and water quality of Michigan forests. Participants stay at MTU’s Ford Forestry Center.  3 cr.  ED 5630