

SUMMER 2016 MOOSEWATCH FOR EDUCATORS AT ISLE ROYALE, MICHIGAN

Ecology of Isle Royale for Educators: ED5560 • July 7 through July 14, 2016



Course Description:

Moosewatch for Educators is a unique field experience in support of the ecological study of wolves and moose at Isle Royale National Park. Educators will receive the technical instruction needed to participate as a member of a backcountry research team collecting moose bones and performing field necropsies on moose kill sites. The research team will be operating in an off-trail wilderness setting involving travel by canoe and foot. They will learn research methods, backcountry navigation, and wilderness living skills. The course will integrate aspects of earth science, geography, anatomy and physiology, and general ecology and mathematics. Moose pathology and anatomy will be an integral instructional component of the program. Participants will provide oral presentations about their experiences (at the end of the field course) as well as develop lesson plans off-site for use at their local schools.

Course Objectives:

The general educational goal of this proposed course is to enhance problem-solving and project-based learning skills of teachers and other educators by providing standards-based instruction within a real world research setting. This goal will be fulfilled with curriculum incorporating more specific learning objectives and applicable activities related to:

- field research methods to generate measurable scientific data and samples;
- application of knowledge in mammal anatomy and physiology in assessing kill sites and collecting specimens;
- field navigation techniques using map and compass, celestial navigation, and GPS;
- wilderness living and travel techniques in a remote, backcountry environment, and;
- experiential learning instructional strategies for elementary and secondary students.

Schedule of Activities: The field component of the course will be seven days in length. Travel to Isle Royale will be by ferry *Isle Royale Queen IV* from Copper Harbor, MI. Instruction and experiential learning activities will take place at several coastal and backcountry locations accessible from the Rock Harbor channel. Travel to camp sites will be by canoe with on-foot excursions from base camps. Instruction in field research methods, backcountry navigation, and wilderness living skills are blended into daily activities. Participants will engage in reflective group discussions, and make a presentation on their experiences to the visiting public and researchers associated with the study. Lesson plans integrating the study's objectives will be submitted electronically for review and may be published.

Cost: \$1,200 resident/non-resident per participant – this covers *Michigan Tech tuition for 3 graduate credits, course materials, transportation from Copper Harbor to Isle Royale, and all food. Participants need to provide only basic backpacking equipment. **Limited to 9 participants, so register soon!**

Credit: 3 graduate credits through Michigan Tech's Department of Cognitive and Learning Sciences

* Cost has been reduced through the generous support of department funding to lower official MTU tuition for teachers with proof of current teacher certification (2015/16 Official Applied Science Education Graduate Resident and Non-Resident is \$561.00 per credit).

ISLE ROYALE MOOSEWATCH COURSE APPLICATION

Please type or print in ink clearly. Duplicate as needed.

Name _____
First Middle Last

Home address _____
Street City State ZIP

Date of birth _____ Social Security or MTU M Number _____

Work phone _____ Home phone _____

Work fax _____ Work email _____

Home email _____

School name _____

School address _____
Street City State ZIP

Current subject areas taught _____

Grades taught _____

School district _____

I agree to all of the following in order to participate in this summer 2016 field course:

- 1) Read and respond to all preparatory materials and communications prior to the course.
- 2) Consent to the release of my name, address, and email address to other participants in the course.
- 3) Fully participate in each day of the course.
- 4) Meet the requirements of the syllabus for the course.
- 5) Consent to posting my lesson plans submitted for this course on Michigan Tech websites.
- 6) Consent to the release of my photograph for publications.

Signature _____ Date _____

Return your completed application by **May 27, 2016 along with a \$100 deposit** to:

Rachelle Gariepy

Teacher Professional Development Coordinator
Cognitive and Learning Sciences/Michigan Tech

1400 Townsend Drive

Houghton, MI 49931-1295

Phone: **906-487-2460** Fax: **906-487-2468** Email: **teacherpd@mtu.edu**

Applicants will be notified of selection by **June 3, 2016**.

Upon registration, participants will be provided a *Moosewatch* application, health form, and course details. Upon notification of selection, participants will receive information regarding final payment. The \$100 deposit will be refunded if you are not selected for participation and will be applied to the registration fee if you are selected. Full payment is due on or before **June 10, 2016**.