# MichigenTech

## SUMMER 2014 ISLE ROYALE MOOSEWATCH FOR EDUCATORS Ecology of Isle Royale for Educators: ED5560 • July 29 through August 6, 2014







### **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 present their findings to the researchers associated with the study as well as develop lesson plans 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
- experiential learning instructional strategies for elementary and secondary students

**Schedule of Activities:** The field component of the course will be nine days in length. Travel to Isle Royale will be by NPS ferry *Ranger III* to/from Houghton, MI. On the island, orientation and training will take place at the Bangsund Cabin (home of the wolf-moose study) prior to the backcountry expedition. 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 make presentations on their experiences to researchers associated with the study, and engage in reflective group discussions. 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 Houghton, MI to Isle Royale, and all food. Participants need to provide only basic backpacking equipment. *Limited to 5 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 reduce official MTU tuition (2013/14 Official Applied Science Education Graduate Resident and Non-Resident is \$514 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 taugl	nt		
Grades taught			
School district			
I agree to all of the following	g in order to participate in this summer 2014	field course:	
, .	preparatory materials and communications	•	
<ol> <li>Consent to the release (</li> <li>Fully participate in each</li> </ol>	of my name, address, and email address to o day of the course.	other participants in the co	urse.
4) Meet the requirements of	of the syllabus for the course.		
	esson plans submitted for this course on Mic of my photograph for publications.	higan Tech websites.	
0			
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Return your completed a	pplication by <b>June 27, 2014 along with</b>	a \$100 deposit to:	
Lori Witting			
Teacher Professional Develop Cognitive and Learning Science			
1400 Townsend Drive	5		
Houghton, MI 49931-1295 Phone: 906/487-2263 Fax: 90	6/487-2468 Email: <u>lori@mtu.edu</u>		
Applicants will be notified	of selection by July 3, 2014.		
Upon registration, partici	pants will be provided a <i>Moosewatch</i> app	plication, health form, ar	ld course

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 **July 14, 2014.**