

Expenses

Tuition (current rates for 3 credits)

In-state

Upper-level	Undergraduate	\$812.49
	Graduate	\$1136.64

Out-of-state

Upper-level	Undergraduate	\$2008.05
	Graduate	\$2407.41

Lodging and Transportation Fee \$525

Lodging will be by tent in State Parks (six nights) and in a dorm at Northern Michigan University (seven nights). Transportation will use WMU vehicles only.

Meals, Incidentals

Expenses will vary depending on individual needs. Meals can be purchased at the NMU Student Union, in restaurants, or be prepared at campsites. Incidental expenses will be for supplies, film, laundry, etc.

Registration

Students already admitted to Western Michigan University should register for GEOS 4380, as a summer-term course, which will meet continuously for two weeks. Formal admission for non-WMU students is not required for this course. Such students may participate in GEOS 4380 by filing for Permission to Take Classes (PTC) status. Additional information will be supplied upon request. Registration for Summer I Session can be done from February 15 through May 4, 2009.

For information and registration contact

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2009

Field Studies in Geology Geosciences 4380

In Michigan's Upper Peninsula

Required for Majors in Field Hydrogeology,

Earth Science Teaching,

And Earth Science-Non Teaching

June 13– June 26, 2009 (Summer Session I)



Offered by the
Department of Geosciences
Western Michigan University

**Dr. Ronald B. Chase, Professor of Geology
Western Michigan University
B.A. DePauw University; M.S., Ph.D.
(1968) University of Montana**

Dr. Chase joined the Geology staff in 1973, having served as Geologist with the U.S. Forest Service, Instructor of Geology at Marshall University, and Assistant/Associate Professor of Geology at the University of Southern Colorado. His field experience includes mapping in New Mexico, Colorado, Wyoming, Montana, Idaho, and Michigan. He has served as field trip leader for numerous excursions, including several to Michigan's Upper Peninsula, and as Visiting Professor of Field Geology at the University of Oklahoma and Indiana University. Dr. Chase is an experienced teacher of introductory geology and field techniques, as well as author of numerous publications, which involve interpretations of field relationships and geologic maps.



Course Descriptions

Geosciences 4380 ((Field Studies in Geology)) is a course for students preparing for careers in earth science teaching, environmental sciences, hydrogeology, outdoor life/recreation, and for geology majors desiring to obtain their first field experience. The course will provide opportunities to observe and record field data, prepare maps and cross-sections, and solve field problems. The geologic history of Michigan will be developed during a tour of the Upper and Lower Peninsulas.

After crossing into the Upper Peninsula, we will examine the geomorphology and Lower Paleozoic geology of the eastern Upper Peninsula. One week will be devoted to various field projects in the Marquette region, and to mine tours and mineral collecting. The remaining time will be spent on a tour of the Keweenaw Peninsula and a brief geological visit to the northwestern sector of the Lower Peninsula.

Schedule

Credit will be given for the Summer Session I 2009.

Upon departure from Kalamazoo, we will visit the Leelanau Peninsula, Tahquamenon Falls State Park and Pictured Rocks National Lakeshore for geologic discussions. One week will be spent in the Marquette area for purposes of field exercises, cross-section constructions, and sample collecting and geological discussions. Our tour will continue to Porcupine Mountains State Park for additional discussions, thence to the Keweenaw Peninsula.