Expenses

Tuition (current rates for 3 credits)

<table>
<thead>
<tr>
<th></th>
<th>In-state</th>
<th>Out-of-state</th>
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<tbody>
<tr>
<td>Upper-level</td>
<td>Undergraduate $1122.99</td>
<td>Upper-level Undergraduate $2775.51</td>
</tr>
<tr>
<td></td>
<td>Graduate $1541.91</td>
<td>Graduate $3265.86</td>
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</tbody>
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Lodging and Transportation Fee $680

Lodging will be by tent in State Parks (five nights) and in a dorm at Northern Michigan University (nine nights). Transportation will use WMU-provided 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 9 through May 11, 2015.

For information and registration contact
Dr. Robb Gillespie
Department of Geosciences
Western Michigan University
Kalamazoo, MI 49008
(269) 387-5364
robb.gillespie@wmich.edu

2015
Field Studies in Geology
Geosciences 4380
In Michigan’s Upper Peninsula
Required for Majors in
Earth Science Education
and Earth Science-Non Teaching
June 6 – June 20 (Summer Session I)

Offered by the
Department of Geosciences
Western Michigan University
Dr. Gillespie joined the Geosciences Faculty at WMU in 2002 after spending 23 years as an exploration and development geologist in the domestic and international oil and gas industry. During this time, he also served as professor of geology for 5 years in the Dallas, Texas Community College System. Field experiences include mapping glacial and surficial deposits of south-central New York. This work is part of the official “New York State - Surficial Deposits” map. He has been co-leader of numerous “American Association of Petroleum Geologists” field trips and in his current position at WMU, leads geology field trips to Egypt, and co-leads the “Geosciences 4380 Field Studies” course in Michigan’s Upper Peninsula. Dr. Gillespie teaches Introductory Geology, Ocean Systems, Natural Hazards and Disasters, Planetary Geology, Geomorphology, and Egypt-Civilization and Geology. He is the author of numerous professional papers, and is currently focused on characterizing the Ordovician, Trenton-Black River reservoirs of the Albion Scipio oil field in Michigan.

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 2015.

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.