# GEOLOGY 496/695 — Field Experience: Geology and Natural History of Iceland Summer, 2004

### SYLLABUS AND PROJECT ASSIGNMENTS

The Department of Geosciences at North Dakota State University (NDSU) will sponsor a field course from July 24-August 8, 2004, on the geology and natural history of Iceland.

The field experience will provide an intensive introduction to Icelandic vulcanism, geology, and landforms, and cultural history including Nordic prehistory. The trip leader will be Dr. Bernhardt Saini-Eidukat, Associate Professor of Geosciences at NDSU. The course will be open to students, alumni, and community members. All participants will contribute to a field guide book to be assembled before the trip. The course will be listed as Geology 496 and Geology 695, for 3 credits.

### **ITINERARY**

We leave the St.Paul - Minneapolis International airport on July 24 to arrive in Reykjavik on the morning of the 25th. We will meet with local experts and spend the next day on the volcanically active Westmann Islands. After returning to the main island, we will then spend the next two days hiking, observing, and discussing the Landmannalauger area before heading over the highland road of Fjallbak Nyrdra to the glacial area of Skaftafell National Park.

We take a boat tour on the Jökulsarlon glacier lagoon before heading inland to the spectacular crater lake of Askja. We then visit the geothermal and other natural features of the Lake Myvatn area, the waterfall at Dettifoss, and the famous Geysir area. The historically important Thingvellir national park and a bath at the world famous Blue Lagoon will round out the trip. The specific itinerary will be posted on the course web site and distributed to the course participants.

The cost of the trip will be approximately \$3100. This amount will include airfare (MSP-Reykjavik-MSP), tuition and fees, 13 days land transportation in Iceland with bus and local guide, boat trip to the Westmann Islands, boat tour on the Jökulsarlon glacier lagoon, and entry fee to the Blue Lagoon. Some meals will be covered as part of the fee, while other meals will be arranged at participant cost during the trip as group camping. Accommodation will be a mixture of camping and hostel accommodations. Most of the trip costs will be charged up front as a set fee (e.g., fees, land package, transportation). Costs not included will be: laundry, tips, airfare from a city other than St. Paul/Minneapolis, souvenirs, travel insurance, passport fee, and other items not specifically included above.

## **GRADING**

For this course, grades will be based on the following considerations:

For undergraduates (Geol 496), the primary criterion will be attendance (70%). 25% of the grade will be based on research on some facet of Icelandic natural (or human) history. The final 5% of the grade will be based on the student's cooperation

with the instructor and fellow course participants, and his/her willingness to learn course content presented by fellow participants.

Those students registering for graduate credit (Geol 695) will be assessed as follows: attendance (60%), pre-trip research on some facet of Icelandic natural (or human) history (20%). Post-trip summary, not to exceed 10 typed pages, summarizing total course content learned by the student (15%). The final 5% of the grade will be based on the student's cooperation with the instructor and fellow course participants, and his/her willingness to learn course content presented by fellow participants.

# **Project Assignment:**

For the project, you will volunteer for (or be assigned) a topic related to a stop for the field trip, itself, or a general topic related to the trip. You will then thoroughly research the topic, preparing a contribution as a chapter to the field text. In addition, each student will present his/her topic in the field. Research topics must be approved by the instructor.

**Field Text Chapter:** A 6 to 8 page contribution to the guidebook will be prepared by each student. The chapter should include an adequate, professional, and even rigorous overview of the chosen topic. It should be supported by graphics, by citations in the text to reference sources, and well-presented list of reference sources. References should give author name(s), date, title, journal or book title, and volume/page numbers. Pages should be numbered by your chapter number assignment at the bottom-center of each page (for example, project "#12" will have pages numbered "12-1, 12-2, etc., at the bottom-center of each page).

You need only prepare one, master copy. I will copy all chapter contributions and present copies to all participants. The field book will be printed such that page \*\*-1 of your chapter will be an obverse page, as will every odd-numbered page. Please therefore leave a binding margin of 1.25" along the left of every odd-numbered page. Likewise, a binding margin of 1.25" should be placed on the right margin of every reverse (even-numbered) page. You may submit chapters in hard copy, or electronically.

**Field Presentation:** Each student will give a 15 to 20-minute oral talk on her/his topic at the appropriate field site. The talk may be supported by graphics within the chapter. The talk should be well-rehearsed and professional. Time will be allowed at the end of each presentation for questions.

DEADLINE FOR RECEIPT OF PRE-COURSE CHAPTERS:
4:30 p.m. CST, Monday, July 19th, 2004.

DEADLINE FOR RECEIPT OF POST-COURSE SUMMARY PAPERS: (graduate students only): 4:30 p.m. CST, Friday, September 3, 2004.

List of Topics: See Geology 496 web site at: http://www.ndsu.edu/instruct/sainieid/iceland/projects.html

For help in selecting a topic, see me or e-mail me (bse@geosci.ndsu.edu).