

METHODS IN GEOSCIENCE FIELD INSTRUCTION

UNIVERSITY OF NEBRASKA-LINCOLN



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♦ CLASS OVERVIEW

Eight in-service teachers, one pre-service education student, three observers from other universities, and two instructors from the University of Nebraska-Lincoln engaged in an inquiry-based geology field course from June 13 to 28, 2015 through Wyoming, South Dakota, and Nebraska. This community of learners spent three days working in the Grand Teton National Park area. Geological features and history present in Grand Teton National Park are an important part of the course curriculum. Large-scale extensional features of the Teton Range and Jackson Hole, and the glacial geomorphology and related climate changes of this area are some of the unique features examined here.



Figure 1. An enthusiastic team of educators exploring geological features of Grand Teton National Park.

♦ COURSE BACKGROUND

This 3-credit graduate course offered by the University of Nebraska-Lincoln is a 16-day, inquiry-based field course for educators. Major goals are: (1) to enhance the 'geoscience experience' for in-service science educators and their students; (2) to teach inquiry concepts and skills that K-12 educators are expected to understand and employ; (3) to inspire science educators to use inquiry and geoscience as unifying themes in their teaching activities; and (4) to provide educators with an effective 'tool-kit' of scientific inquiry-based, and discovery-learning teaching practices.

This field course offers an opportunity to discover the geological history of the Rocky Mountains and experience and discuss inquiry-based scientific methods. The group built upon their growing geological knowledge to investigate the geological evolution of the Teton Range and Jackson Hole.

Recent quotes from educators about their experience:

"I have never learned or done so much in 2 weeks ever in my life."

"I'm inspired to continually bring up opportunities for wonder in my students."

"I felt like I was on 'survivor' and I was succeeding."

"This is truly the best course I have ever taken. I have learned more about geology, myself, others, life, etc., than I ever have or could have in one year."