Instructor: Jeff Eaton, Room 207m, phone 626-6225, e-mail: jeaton@weber.edu
Office hours: 9:30-10:20, MWF; 8-9, TTh; or by appointment.


Basis of Grade: There will be a 100 point midterm and a 100 point final exam before the last week of class. Exams will consist of short answer and essay questions. There will also be a term paper worth 100 points that will detail some aspect of Utah's geologic history based on recent journal publications and possibly some fieldwork. You will present this paper to the class and there will be 25 points for the presentation (and handouts) alone. There will also be reserve reading for which the material is testable and participation in class discussions will be considered in your grade. Points will also be awarded for interest and effort during the fieldtrip (25 points).

Purpose of the class: To provide you with a basic knowledge of the current interpretations of Utah's geologic history and the basis for these interpretations. It is also important to see the geology of Utah as a reflection of global tectonic phenomena and the evolution of North America. The class is intended to help students grasp the geology that surrounds them and to aid teachers in using Utah as a remarkable resource for Earth Science education.

Aug. 26: Introduction & basic physiography of Utah. Begin overview of Utah Geology if there is time.
Aug. 28: Overview of tectonic history of Utah (to prepare you for the fieldtrip), Hintze, p. 1-6.
Sept. 9: Early (Paleo) Proterozoic
Sept. 16: Precambrian plate configurations.
Sept. 18: Cambrian, Hintze, p. 18-25. Leave for field trip 1 PM
Sept. 18-21: UGA Fieldtrip in southern Utah.
Sept. 30: Devonian. Hintze, p. 34-36.
Oct. 16: EXAM 1 – Precambrian-Paleozoic, in this classroom.
Nov. 4: Late Eocene -Oligocene-Early Miocene. Hintze, p. 89-99. Last day to withdraw from an individual class.
Nov. 6: Middle Miocene-Holocene. Hintze, p. 100-111
Nov. 11: The Quaternary & Lake Bonneville. Hintze, p. 112-119
Nov. 13: Present day Utah. Hintze, p. 120-132.
Nov. 18: Catch up and complete Mesozoic and Tertiary trends. Hintze, p. 3-10.
Nov. 20: Review.
Nov. 25: EXAM 2 – Mesozoic-Cenozoic, in this classroom.
Nov. 27-28: THANKSGIVING HOLIDAY – no classes
Dec. 2: Presentation of papers.
Dec. 4: Presentation of papers.
Dec. 8: TERM PAPERS DUE
FIELDTRIP

Schedule:
Leave: Thursday, September 18, by 1 PM.
Return: Sunday, September 21, by 5 PM.
Bring warm clothing (layered), a good sleeping bag, and a tent for shelter (share a tent!). Also bring a day pack, water bottles, and a notebook.

INSTRUCTIONS FOR TERM PAPER

You are to prepare a term paper that details some episode of Utah's history that is documented in the recent published literature. I will expect you to read several articles and from these put together a detailed history the scale (amount of time and geographic extent covered) will depend upon the nature of the topic. It would also be helpful, but not essential, to visit the area so you may take samples and photographs which help to document the history.

The paper should be around 10-15 pages long, double-spaced. The paper should begin with an Abstract (we will discuss what an abstract is in class). **Please submit 2 copies** of your paper - I will carefully mark one for you to keep and I will keep a copy for my files.

The format, headings style and references cited should follow the style of GSA publications (see *Geology* and *The Bulletin of the Geological Society of America* in the library for examples). All figures should be referred to in the text and presented in the appropriate sequence by number and captioned as in GSA format.

Give the source for any ideas you present (see GSA format; e.g. Eaton, 1985) and you need only give a page number if you use a direct quote (e.g. Eaton, 1985, p. 273). I need to know which thoughts are yours and which thoughts are those of other authors.

You will need to submit a title, brief outline, and a list of references by October 23. I will need to approve your topic, outline, and references before you can proceed with your paper. All students will give a 10-20 minute presentation of their paper during the last few classes of the quarter. At that time you will present each of your colleagues a **copy of your abstract with references**.

Your paper will be graded based both on your oral presentation (25 points) and on the evidence of the quality of research (detail and understanding of the articles you read), the synthesis of the varying interpretations you located, the creativity expressed by the presentation of your own ideas, the quality of the written document including grammar and spelling (100 points). In a 3000 level class, I expect this to be more than a book report and hope to see you synthesize literature and create new questions of your own.

Simply paraphrasing or copying text is considered plagiarism at it will not be tolerated. I want your words and thoughts and I expect it to reflect more than one source.