

FYSE 1275, Fall 2009
The Geological Landscape of Native America

Meeting Times and Places:

Lecture: BIH 419, Mon, Wed, Fri 11:15 – 12:05

Lab: BIH 419, Thurs 1:30-4:15 (for field days, meet at van pick-up area).

Instruction:

Peter Crowley Ryan, BIH 429, 443-2557

e-mail: pryan@middlebury.edu (I prefer e-mail over phone messages...)

Office Hours: M-W-F 10:00 – 11:00

Required Book:

Mann, C.C (2005) 1491: New Revelations of the Americas Before Columbus. Alfred A Knopf, New York, 465 p.

Course Content and Objectives:

In this course we will examine numerous issues related the geology of America prior to the fifteenth century. What types of landscapes were encountered by early Native Americans? Did they first arrive here via a Siberia-Alaska land bridge a mere 13,000 years ago, or have people lived in America for longer... perhaps > 30,000 years as potentially indicated by the Monte Verde site in Chile? Or perhaps longer? Many of the answers to these questions are contained in the geological record of lake sediments, river terraces and other geological environments. We also will examine questions such as “how have American landscapes evolved over the millennia, and how did early Americans adapt?”, and “how did American Indians adept their landscape to suit their needs, and what were the effects?”

Specific objectives of this course include the following:

- To critically analyze selected issues related to pre-Columbian and post-Columbian, including (A) evidence from the geological record for ancient (e.g. pre-12,000 years ago) habitation of the Americas; (B) the natural environment encountered by American Indians, and (C) ways in which American Indians altered their natural environments;
- To become better writers through an iterative writing-editing-revising process;
- To practice verbal expression through in-class discussion;
- To learn of regional geologic history;
- To explore various records of geological events as recorded in tribal oral histories;
- To understand the scientific method and how scientific information is disseminated;
- To learn to find and assess sources of information; and
- To become adept critical thinkers (see below).

Critical Thinking Objective

As a student in this class you should approach all topics in this course from a critical thinking perspective. Critically assess what is being presented in the class. Does it make sense? Does it relate to something? Can you come up with an analogy that will better illustrate the point? Be an active thinker. Participate. The depth at which you learn is directly related to the degree to which you work at figuring it out yourself. If I merely stand in front of the room and lecture

with no interaction, no discussion, and no practical application, then you probably will only understand the materials at a basic level, with no depth. You are expected to be an active participant. Be curious. Whether in the classroom, lab, or in the field, make observations, ask informed questions, and do not be afraid to be wrong. In order to examine writing style and effectiveness, we will criticize assigned readings in class. I will edit your assignments and you will submit revised drafts—as you go about revising your writings, consider your writing style. Above all else, you should leave this class with critical thinking skills and writing skills befitting a college student.

Evaluation/Grading

You are required to attend all class and lab meetings. You will be assessed on class participation, both in terms of amount and content, so attend class. If you must miss class, approach me ahead of time or get a Dean's Excuse. You will be expected to ask questions, participate in discussions, and be an active member of the class.

Essays (3 total, 3 – 5 pages each).....	30 % total
Participation, small assignments.....	20 %
Journal article presentation (with 2 partners).....	10 %
Term paper proposal.....	5 %
Term paper first draft.....	10 %
Term paper final draft.....	20%
Term paper presentation (8 minutes)....	5%

Late Assignments will be docked 10% per weekday that they are late.

CALENDAR and DUE DATES (all due at the beginning of class/lab on the date assigned):

- **LAB 1:** Field trip and hike to Snake Mountain: Envisioning the landscape encountered by the first inhabitants of the Champlain Valley ~11,500 years ago. Thurs Sept 10th.
- **Essay 1** (field trip description): Wednesday September 16th.
- **LAB 2:** Field trip to shorelines of the ancient Champlain Sea and other local landscape features. Thurs Sept 17th.
- **Literature search assignment:** Thursday September 24th.
- **LAB 3:** Technology/research resource workshop in Armstrong library. Thurs Sept 24th.
- **LAB 4:** Tentative: Field trip along a major pre-1800 transportation route, the Otter Creek.
- **Term Paper Proposal** (1 page, 10 references): Wednesday October 7th.
- I will be at the Geological Society of America conference Oct 17 through 21 and there will be no official class meeting. While I am gone you will work on term papers and make use of your peer-writing tutor (Dylan) and reference librarian (Carrie Miyoshi McFarlane) as needed.
- **Essay 2** (summary and critical assessment Mann lecture): Wednesday October 21st.
- **Term paper draft one:** Wednesday November 4th. Details to follow.
- **Term paper final draft:** Monday November 23rd.
- **Essay 3** (TBA).
- **Research paper presentation:** Final week of class and lab.
- The **journal article presentations** will take place throughout the semester. You will do only one and you will do it with two classmates. Effectively you will present highlights of a peer-reviewed journal article of the type cited in Mann (2005) and help lead a discussion on the topic.