

## COURSE SYLLABUS

**TITLE:** Nevada's Mining History

**NUMBER OF CREDITS:** 1.5

**COURSE NUMBER:** Geol 299B E02

**INSTRUCTOR:** Terry F. Rees, Ph.D.

**MEETING DATES:** June 24-27, 2008

**MEETING TIMES:** 8:00 AM to 4:00 PM, breaks for lunch

**MEETING LOCATIONS:** This is a field course. Initial lecture will be at the Fernley Campus, Western Nevada College (building and room to be determined). Surface travel will be by van or motor coach to Tonopah, Eureka, Ely, and Elko, with field stops and lectures enroute. Because of the field nature of the course, participants must attend the initial lecture and stay with the field trip throughout the course.

**WHO MAY ATTEND THIS COURSE:** Course is open to all Western Nevada College students.

**IDENTIFY COURSE PRE-REQUISITE:** This is a field course that features a tour of working open-pit mines. Participants must be in good health and have appropriate sturdy shoes and clothing. A history or science background would be helpful, but not necessary. Students must register and pay for the educational tour through Pheasant Services at [www.pheasantservices.com](http://www.pheasantservices.com), in addition to registering for the class through Western Nevada College.

**GOALS FOR THE COURSE:** This course is designed to provide both a geologic and a historical perspective of mining in Nevada. Students will become familiar with the geology of northern Nevada and how that geology affects the location of geothermal and mineral deposits. Students also will learn how the geology affects the historical development of Nevada and how that development affects modern life in the State.

**INSTRUCTIONAL FORMAT:** This course includes lectures about principles and concepts, coupled with field experiences that demonstrate material presented in the lectures. Local experts will join the participants for discussions at the mines and museums.

**TEXTBOOK/PRINTED MATERIAL/RESOURCES:** Fiero's Geology of the Great Basin, Hulse's Nevada's Heritage Reinterpreted, and a set of handouts.

**ABSENCE POLICY:** Participants must attend all class activities to receive credit.

**DAILY TOPIC OUTLINE:** Attached.

**STUDENT ASSIGNMENTS:** Students will be required to submit a term paper covering any topic discussed during the course. Alternatively, students who are teachers wishing re-certification credits will be required to develop a 5-day thematic unit, appropriate to the age they teach, utilizing the concepts presented during the class. The term paper/thematic unit is due July 10, 2008.

**GRADING PROCEDURE:** Course grade will be based on class participation (50%) and evaluation of the term paper/thematic unit.

## **COURSE OUTLINE**

### **Nevada's Mining History**

#### **Course Number:**

#### **Tuesday, June 24, 2008**

8:00 – 8:30 AM	Registration and sign-in.
8:30 – 10:00 AM	Overview of field course.
10:00 AM	Board van/motor coach to Tonopah. Lecture enroute on geologic history of Nevada. Stop at Walker Lake with discussion of water issues in the Walker River Basin and the fate of Walker Lake. Box lunch. Discussion of mineral deposits and mines around Tonopah. Tour the Tonopah Historic Mining Park that includes an underground mining tunnel restoration.
6:00 PM	Check into Hotel in Tonopah. Dinner at a local restaurant.

#### **Wednesday, June 25, 2008**

8:00 AM – 12:00 PM	Board van/motor coach to Eureka. Lecture enroute on the Toiyabe Orogeny and the mines of Belmont, Manhattan, and Austin. Visit the Hickison Petroglyph site.
12:00 – 1:00 PM	Lunch at a local restaurant.
1:00 – 3:00 PM	Tour Eureka Sentinel Museum and Eureka Opera House with local experts.
3:00 PM	Board van/motor coach to Ely. Lecture on the geologic transition from volcanic rock province to the carbonate rock province and the porphyry mineral deposits around Ely.
6:00 PM	Check into hotel in Ely. Dinner at a local restaurant.

#### **Thursday, June 26, 2008**

8:00 AM – 12:00 PM	Board van/motor coach to Carlin. Lunch at a Carlin Trend gold mine.
1:00 – 5:00 PM	Tour of Newmont Mine. Lecture on the genesis and mining of the dispersed gold deposits of the Carlin Trend. Tour of one of the surface pit mines and demonstrations by local mining experts.
5:00 PM	Board van/motor coach to Elko.
6:00 PM	Check into hotel in Elko. Dinner at a local restaurant.

#### **Friday, June 27, 2008**

8:00 -10:00 AM	Board van/motor coach to Winnemucca. View the Copper Canyon and Pipeline Mines with discussion of hydrologic effects of mining. Stop at road repairs necessitated by land subsidence cause by mine dewatering.
10:00 AM – 12:00 PM	Tour the Humboldt County Museum in Winnemucca.
12:00 PM	Box lunch.
12:30 PM	Board van/motor coach to Fernley Campus.
3:00 PM	Return to Fernley Campus, Western Nevada College.