**COURSE SYLLABUS** **NR 108 – Introduction to Field Studies**

Held at the Reedley College School Forest – Sequoia Lake and other employment sites

**9/12 – 9/13 2013**

Instructors: Kent Kinney/Joshua Soderlund/David McCandliss/Louie Long

Email: [kent.kinney@reedleycollege.edu](mailto:kent.kinney@reedleycollege.edu), [louie.long@reedley.college.edu](mailto:louie.long@reedley.college.edu), Joshua.soderlund@reedleycollege.edu

Phone 559-638-3641 x3275

Credit/No Credit

**When: Tuesday, September 3rd, 4:00- 5:30 PM FEM 8 (**Crew dynamics, Work Preparation Information) THIS IS THE FIRST MEETING. IT IS REQUIRED

**And**

**Thursday September 12th (7:00 AM) though Friday September 14th (5:00 PM), Meet the busses east of the Agriculture Mechanics (CAT) building at 7:00 AM**

**What to Wear: Thursday - Long Pants, Work Boots, Long sleeve work shirt, Gloves, Eye Protection. Take a day pack with two quarts of water and your lunch for the day. You will be outside all day and you will be hiking.**

**Don’t forget your lunch and drinking water!**

**Friday - Long Pants, Long-Sleeve Shirt, Hard Hat, Gloves, Safety Glasses, Water Pack**

**Schedule:**

**Thursday**

0700 Load buses and cargo depart from Reedley College

0830 Orientation to Sequoia Lake, Reedley College Forest (Evan Gelsi)

0945 Forest management at Sequoia Lake

1100 Job Hazard Analysis

1200 Lunch

1300 Project Work

1630 Discussion of Activities and Work

1700 Free Time, Preparation for Dinner

1800 Dinner

1845 Self Introductions

1945 Reedley College Counselor Presentation

2100 Forestry Club

2130 Conclusion and release

2230 Lights out

**Friday**

0700 Breakfast

0800 Work day begins

1200 Lunch

1230 Work day resumes

1300 Forest Conservation Days Workshop (SAF Members)

1530 Work day ends, Load equipment

1700 Arrive at RC

1730 Release students

**Required Items To Bring:**

* **PPE (Personal Protective Equipment) Leather 8” work boots, hard hat, gloves, safety glasses (have these ready to show at roll call Thursday morning)**
* Sleeping bag
* Lunch for Thursday (dorm students request the day before)
* Water Camel pack, day pack with water bottles, or water bottles on web (you must pack water without holding bottles in your hands while hiking and working)
* Extra clothes: underwear, shoes, socks, etc.
* Coat or fleece sweater (nights will be **cold**!)
* Rain gear
* Personal gear, soap, shampoo, towel, etc.
* Personal medication (e.g. Benadryl®, Advil®, or Asprin)

**Pack all of your gear (including sleeping bag) in one suitcase, duffle bag, or backpack for transport. Compress all gear in as small a space as possible. This will be hauled and handed by other people. Do not take valuables. Put a name label on your luggage.**

**WARNING**

During most years, there are bees, bear, mountain lion, and other wild animals in and around the camps at Sequoia Lake. Do not leave any food items in your cabins at any time. Food and drinks can be stored in the cooler in the mess hall. Bears will break into your cabin, vehicle, or anything else in order to get to food.

**Objectives and Guidelines:**

The above field studies course is a two-day class conducted at the Sequoia Lake campus (school forest). It begins at the Reedley campus on Thursday and ends on Friday afternoon. Transportation to Sequoia Lake is provided. Any other arrangements must be made with the instructor at least one week prior to the trip. Cabins and beds are provided for the students, and all meals. Any special dietary needs must be submitted to the instructor one week prior to the trip. A list of regulations, items that you should bring, guidelines for the workday, a schedule of activities, a student contract, and a brief history of Sequoia Lake are included in this handout. There is normally a $50 fee that must be paid for Field studies courses. This fee pays for the lodging and food provided by the YMCA conference. Cancellation of the trip must be made two weeks prior in order to receive a refund for the room and board fee.

Friday will be spent working on a forestry field project that not only helps keep the room and board fee low, but also is an integral part of each field course curriculum. You should perform the work as though this is a job. The instructors observe your performance in order to recommend you for summer employment. And, Reedley College students have proudly served a very important function at the Sequoia Lake forest for many years. You will have an opportunity to continue that tradition.

Course Outcomes:

Upon completion of this course, students will be able to:

1. Identify career employment positions that match their interest and skill sets.
2. Safely use a pulaski to construct forest trails.

C. Predict forest management strategies employed by the three different natural resources management agencies (i.e. United States Department of Agriculture Forest Service, United States Department of Interior National Park Service, and CALFIRE) as related to fuels management in a mixed conifer forest.

D. Analyze ecological relationships of the biotic and abiotic components of giant sequoia groves within a mixed conifer forest

Course Objectives:

In the process of completing this course, students will:

A. Apply basic forestry and natural resources skills under field conditions.

B. Identify job skills needed in the forestry and natural resources field.

C. Distinguish between management objectives of the various agencies involved in natural resources management.

D. Describe watershed factors that contribute to giant sequoia tree reproduction.

**Field Trip Regulations**

During these field courses, all college policies will apply just as if you were at Reedley College.

* There will be NO USE OF DRUGS OR ALCOHOL during the field trip. This is a zero tolerance policy and any deviation may result in expulsion from College.
* There will be no smoking allowed in any area of the school forest, except in designated areas and times, and with extreme caution. Absolutely no tobacco products may be used in the cabins.
* Proper field clothes (hard hat and boots, long pants and long-sleeved shirt) will be worn during the field-training portion of the course. **Bring your own**.
* Students must be present for the entire session to receive a grade.
* If you are sick or injure yourself ... SEE AN INSTRUCTOR IMMEDIATELY.
* Lights out and quiet time from 10:30 p.m. to 5:00 a.m.
* Water is limited, so please take quick showers.
* When going on walks, etc., **never go alone**.
* All food will be provided, except for Thursday lunch ... bring a sack lunch. If you have special food requirements, let instructors know 1 week in advance.
* Do not use profane or discourteous language.
* Use two-way radios only when essential for work tasks or safety and follow proper etiquette.
* Mature, appropriate behavior is expected of everyone throughout the day and night.
* You cannot drive your own vehicle without proper approval two weeks in advance
* When you return to the college you will stay to unload and properly store all equipment. Your responsibilities for this class are not over until this entire task is completed. Work as a crew.

**Attendance**

**This course will commence at 1600 hours (4:00PM) on Tuesday, September 3 at Reedley College, Room FEM 8 for a roll call and to give important information for the trip. All students must attend or have special permission by their instructor to make alternate arrangements.**

**And…**

**Thursday 8/12, at Reedley College his course will commence at 0700 hours (7:00AM) on.** You may park your vehicle on campus or have someone drop you off. You will board a bus provided for your transportation.

Please do not come late. You may be left behind unless you arrive on time.

The return to Reedley College is scheduled for Friday at 5:00 PM.

**Phone numbers in case of an emergency are:**

YMCA - Camp Tulequoia

335-2603 or 335-2472

**General Work Standards**

We are proud of our Forest/Park Technology program here at Reedley College. Our expectations are for students to meet the following standards:

1. Our school forest is a unique and beautiful property; therefore, always treat it with respect. Pick up any trash you may find anywhere.
2. Students will observe all safety rules at all times.
3. Student will not be allowed to participate in the workday unless they have proper work clothes (long sleeved shirt, long pants, hard hat, leather work gloves, and proper laced boots with lug soles). Be prepared to show that you have these items as you board the bus for departure.,
4. During the work period, students will stay with their assigned crews unless given permission to do otherwise by the supervisor.
5. The workday begins promptly at 0800 and will end at 1700. There will be a 30-minute lunch break. Other breaks will be determined by the supervisor.
6. All tools, equipment, and materials assigned to crews will be returned to the tool truck at day’s end. Work sites will be cleaned up before leaving the job site.
7. Crew supervisors are responsible for maintenance of tools and equipment at the conclusion of the workday.
8. Chainsaws and hand tools will be cleaned, dull chains replaced with sharp ones, and damaged or defective saws and tools tagged for repair, etc. Dull chains will be put into orange cans provided.
9. Students using power pruners, chainsaws, the wood chipper, or conducting any activity, which could injure the eyes or ears, will wear safety glasses or screen goggles and ear protection. **NO EXCEPTIONS**.
10. Crew leaders are responsible for the correct disposition of all tools, equipment, and materials used for their respective projects.

SCHOOL FOREST AT SEQUOIA LAKE

Historical Background

The property was first occupied in 1888 by Smith and Moore. They purchased thousands of acres of Sierra mixed conifer timberland and formed the "Kings River Lumber Company" (Johnson 1970). Soon after, in 1889, the logging of Sierra Redwood (Sequoiadendron giganteum) began. At the same time, Mill Flats Meadow was dammed up and Sequoia Lake was created to supply water to the mill and flume at Millwood Flats.

For a few more years, the "Sequoia Lake" was a well known summer resort development (Johnson 1966). In 1905, the Kings River Lumber Company went bankrupt, and the property was sold to the Hume-Bennett Lumber Company. During the period the whole property was completely logged for Sierra Redwood. Early photos illustrate the area in and around Sequoia Lake was a stump field.

Thomas Hume took over the total operation of the Hume-Bennett Lumber Company and ran it until his death, at which time his son, George, ran the operations until 1917 when the mill at Hume Lake burned down. In 1922, George Hume offered the property, including the present day Sequoia Lake, for sale. A group of men from Kings, Tulare, and Fresno counties representing the YMCA purchased 628.5 acres for $30,000 in 1922. Later on two more parcels of 10 and 12 acres were purchased at $1,000 each to bring the total to 658.5 acres. More recently, the Sequoia Lake conference of YMCA’s purchased an additional 117.5 acres of land adjacent to the SW border of the property. This acquisition has been poorly managed in the past and will require considerable rehabilitation efforts in the future. The property at Sequoia Lake now totals 776.0 acres.

Between 1922 and 1970, the property was used exclusively by the Sequoia Lake YMCA. In 1970, Reedley College began to use the property as a school laboratory area on an intermittent basis. During the fall of 1976, the college began a continuous use of both day and overnight field trips. For a while overnight field trips were four days in length, with two trips each semester. These field trips are now a graduation requirement and an integral part of our technician program.

In 1980, an agreement (formal contract) was consummated between Sequoia Lake Conference of YMCA and Kings River Community College Forestry programs. This document spelled out the conditions that the college and YMCA would operate under to provide development and implementation of good forest land management practices. In 2001, the agreement was updated and we continue to operate under that contract.

We owe a very special thanks to Jim Egleston. Jim was a long time supporter and contributor to the success of the partnership between Reedley College and Sequoia Lake. His 25 years of commitment to YMCA’s progress, growth, and improvement was unsurpassed. Egleston was not only a resident of Sequoia Lake, but a valuable asset. As executive director of Sequoia Lake YMCA, he was instrumental in coordinating our college activities. Jim passed away in November of 1998, and he will be greatly missed.

**Natural History**

Sequoia Lake is located in Fresno County near the Tulare County border (Figure 1). The lake, which is located in the approximate center of the property, is 88 acres when full. The lake shore grades upward gently for a distance to very steep slopes, some over 170%.

The lowest elevation on the property is 4,950 feet and the highest is 5,990 feet. The average elevation of the property is 5,520 feet. The lake shore is 5,340 feet.

**Natural Resources**

Timbered: As stated earlier, over 440 acres of the property are timbered. Much of the acreage is capable of growing substantial timber crops, and has done so in the past (Johnson 1966).

Soils and mensurational data thus far gathered indicate the forested acres for the most part are of high site quality. A considerable part of the forested areas are Site I-A or I-II. Adjacent to the property on the east side are excellent examples of virgin, old growth Sierra mixed conifer stands. That mixture is composed of: Sugar Pine (Pinus lambertiana), Ponderosa Pine (Pinus ponderosa ), Jeffrey Pine (Pinus jeffreyi), White Fir (Abies concolor), Incense-Cedar (Calocedrus decurrens), Giant Sequoia (Sequoiadendron giganteum), and California Black Oak (Quercus kelloggii).

The lake property contains some of the best examples of Sierra mixed conifer stands in our general area. Presently, the property is in a well-stocked condition with areas ranging from 160 square feet/acre on thinned stands to 355-400 square feet/acre on untouched stands.

In 1981, the college and YMCA Board of Directors undertook the development of a timber sale which encompassed about 218 acres on the north and east sides of the property. At that time, approximately 1.8 million board feet (mmbf) of mixed conifer saw logs were harvested. In 1983, an additional 26 acres were harvested on the southeast side of the school forest with a removal of about 75 mbf board feet. A sale took place in the fall of 1994 which encompassed 132 acres and removed about 0.5 mbf of mixed conifers. Another timber sale will be planned in the near future.

Many acres required either pre-commercial and/or commercial thinning in order to maintain a healthy, vigorous growing stand. To date, 127 acres have been thinned from an original stand of 900 - 1,200 trees/acre to approximately 350 trees/acres. There remains 15-20 acres of pre-commercial thinning to be accomplished.

Because of natural decline and past logging practices, large blocks of the property are classed as an extreme risk to wildfire. The US Forest Service standards for acceptable limits of available fuel per acre are in the range of 10-30 tons/acre. From preliminary data gathered at Sequoia Lake, many acres contain between 80-150 tons/acre of available fuel. In short, there is a very high risk of a disastrous wildfire on the property. Since 1981, fuels throughout the property have been continually reduced. Presently, we have some acreage in the extreme category, but most of the forested areas are now in the moderate to high range (30-50 tons/acre).

# **PERSONAL CODE OF CONDUCT**

# **STUDENT CONTRACT**

As a student enrolled in the Forest/Park Technology program at Reedley College of the State Center Community College District within the Community College system of the State of California, I agree to abide by the rules and regulations as outlined in the Reedley College catalogue, under "Policy", and the additional provisions included herein.

1. No alcohol or other non-prescription drugs are permitted on the RC campus, on any field trip, or at the RC school forest at Sequoia Lake.
2. No smoking, except in designated areas and only with permission of instructor. No chewing tobacco in cabins.
3. All students will participate in the entire field trip, beginning and ending at RC. All transportation will be provided by the college. No personal vehicles will be allowed without a valid reason and prior written permission.
4. Rules pertaining to safety will be strictly observed.
5. No firearms, pets, or persons not enrolled in the field course are allowed.
6. Rules, policies, and procedures specific to Sequoia Lake will be observed.
7. Students will remain on the Sequoia Lake property for the duration of the field trip.
8. Mature, appropriate behavior is expected of everyone throughout the day and night.
9. Students will arrive promptly at 0700 on Thursday and participate in all assigned tasks and remain productive until their release at 1730 on Friday

**Anyone not conforming to the above conditions may not receive course credit and may be immediately expelled.**

By signing this document, I acknowledge my personal commitment and responsibilities as they relate to the Forest/Park Technology program at Reedley College, and I understand and accept the consequences for my personal actions as they relate to the provisions laid herewith.

Name (Please **print**) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Signature

***Student Copy*****PERSONAL CODE OF CONDUCT**

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Signature

###### School Copy

submit before departure