



NATIONAL SKI PATROL
Far West Division – Mother Lode Region
Pinecrest Nordic Ski Patrol
Avalanche I
January 23, 24, 31, 2010



Course Syllabus

Thank you for registering in the Avalanche 1 class to be held at Pinecrest on January 23-24, 2010 and near Castle Peak on January 31. Enclosed is the student pack for the course, please make sure you review all the material before the class and complete the pretest. The contents are listed below, please contact the course instructors (see details below) if any items are missing. You may also download this information from the Pinecrest Nordic Ski Patrol web site at <http://www.pinecrestnordic.org/av1>.

This course syllabus contains a preliminary weekend agenda, important logistics (lodging, meals, etc), and guidelines for personal equipment.

Additional course information will be mailed to you prior to the course weekend:

- Snow Sense Text
- NSP Avalanche Rescue Quick Guide
- Pre Test
- NSP Far West Division Event Release Form

All students must read the Snow Sense and Rescue Quick Guide text and complete the pre-test BEFORE the course weekend (we will check your work at check-in, so bring a printed copy). All students must sign the NSP Event Release form in order to participate in the course (you may sign this in person on Saturday, January 23).

If you are a minor you must have the event release form signed by your parent or guardian before the class. (Unless you already have submitted it with your registration).

For those who prefer to travel Friday night, lodging will be available as a courtesy at the Pinecrest Community Center (See course logistics).

IF THERE IS ANYTHING YOU DO NOT UNDERSTAND, OR HAVE QUESTIONS ABOUT, PLEASE DON'T HESITATE TO E-MAIL US ASAP.

Regards,

Keith Gale
Course Coordinator
keith_gale@hotmail.com

Patrick Gallery
Instructor of Record
haishan1@yahoo.com

Agenda

SATURDAY – January 23, 2010 - 08:00 PINECREST COMMUNITY CENTER

PLEASE BE ON TIME! The Pinecrest Community Center is located on Pinecrest School Road off Dodge Ridge Road (after Meadowview campground and before Camp Oski). Leave your equipment in your vehicles for now. **Bring your Pre-Test, and writing materials to take notes.**

08:00 – 08:15: Check-in, Check off Pre-Test, & Sign Liability Release Form

08:15 – 08:30: Introductions and Course Overview

08:30 – 09:00: Avalanche Awareness - Hazards and Characteristics

09:00 – 10:30: Avalanche Triangle (Terrain, Snowpack, Weather)

10:30 – 11:00: Snow Mechanics and Avalanche Dynamics

11:00 – 11:45: Stability Assessment

11:45 – 12:30: Working Lunch – Pre-Test Review

12:30 – 13:30: Companion Rescue (Transceivers, Probing, and Shoveling)

13:30 – 14:00: Travel to Crabtree Trailhead

14:00 – 17:00: Field Exercise
Terrain awareness and “quick” stability evaluations
Beacon practice
Rescue organization
Probe lines
Regroup at Trail Head

17:00 – 20:00: Break for Dinner

20:00 – 22:00: Pinecrest Community Center
Human Factors and Personal Safety
Scenario Discussion: Travel in Avalanche Terrain
Avalanche Videos

Agenda

SUNDAY – January 24, 2010 – 08:00 PINECREST COMMUNITY CENTER

- 08:00 – 09:30:** Organized Rescue
- 09:30 – 10:00:** Drive to Gooseberry Trail Head
- 10:00 – 11:00:** Travel to field location
Do beacon check en route
Terrain recognition
- 11:00 – 12:00:** Snow Pit analysis
Qualitative analysis
Reutschblock test
Shovel shear test
- 12:00 – 13:00:** Lunch
- 13:00 – 15:30:** Rescue scenario
- 15:30 – 16:00:** Return to Trailhead
- 16:00 – 16:30:** Return to Pinecrest Community Center
- 16:30 – 17:00:** Final Debrief and Planning for Field Exercise
Clean-up

All participants (*students, instructors, advisors*) are to return to the Pinecrest Community Center at the conclusion of Sunday field exercise.
NO EXCEPTIONS !!

During the week of January 25 students will be required to review trip plans and report to class the following weekend with a comprehensive travel strategy based on available maps, weather and snow reports, personal and team equipment, and group make-up and dynamics.

Agenda

SUNDAY – January 31, 2010 – 08:00 CASTLE PEAK SNOW PARK

Note: Please report to the trailhead on time and ready for a full day on the snow.

Pending weather and snow conditions, the field day may be subject to re-scheduling to Saturday 1/30 or a subsequent weekend. The following schedule is tentative and may change depending on conditions during the day.

Note: A Sno-Park permit is required to park at this trailhead. Permits can be purchased (\$5 day-use) in advance at many locations or by mail; permits can also be purchased same-day at the Boreal Inn adjacent to the parking area. For info:

http://www.fs.fed.us/r5/tahoe/passes_permits/snopark.shtml

08:00 – 08:30: Review objectives and trip plan

08:30 – 09:00: Break into teams, gear up, and depart trailhead

09:00 – 11:00: Travel to field location
Do beacon check en route
Terrain recognition

11:00 – 12:00: Snow Pit analysis

12:00 – 13:00: Lunch

13:00 – 14:00: Avalanche transceivers

14:00 – 15:00: Rescue scenario

15:00 – 15:30: Final Debrief

15:30 – 16:30: Return to trailhead

All participants (*students, instructors, advisors*) are to return in teams to the Castle Peak Sno-Park trailhead at the conclusion of Sunday field exercise. Nobody will be dismissed until all teams, members, and instructors are present and accounted for at the trailhead.

NO EXCEPTIONS!!

Logistics

1. Time and Location

Date	Location	Time	Class Hours	Field Hours
Saturday, January 23	Pinecrest Community Center	8am - 10pm	8	3
Sunday, January 24	Pinecrest Community Center	8am - 5pm	3	6
Sunday, January 31	Castle Peak Sno-Park	9am - 5pm	0	8

- The recently revised curriculum for Avalanche I for Rescue Personnel requires a minimum of 28 hours instruction (typically 10-12 hours classroom, 16-18 hours field) over 3-4 days. We will take advantage of our access to the Pinecrest Community Center to conduct further classroom hours on the first Saturday evening of the course (January 23), thus allowing us to complete the full curriculum in 3 days.
- The first weekend of the course is held in Pinecrest, CA on January 23-24. The classroom component of the class will be held in the Pinecrest Community Center. The Community Center is located on Pinecrest School Rd, - first right hand turn on Dodge Ridge Rd. Link to Google map:

<http://tinyurl.com/pinecrest-av1>

- Field sessions during the first weekend will be held on the Nordic trails accessed from the Crabtree or Gooseberry Road trail heads.
- Class Registration starts promptly at 8 AM Saturday morning. Please be on time. You will be asked to check in, sign the liability waiver, and complete a Columbia Community College registration form (this helps support PNSP).
- The second weekend of the course will take place entirely in the field, tentatively planned for Sunday, January 31 at the Castle Peak Sno-Park area near Boreal Ski area and Donner Summit on I-80. This location offers better access to more avalanche terrain in which to conduct field exercises.

2. Accommodations

- The Pinecrest Community Center will be available to sleep in on Friday and Saturday nights (January 23-24). The center will be opened on Friday night, at a time TBD. Class starts at the same location 8 AM Saturday morning.
- NOTE: This is courtesy accommodation. Sleeping arrangements consist of an open floor on which to spread a sleeping bag. The community center can be noisy throughout the night - doors slamming and people snoring. Please bring ear plugs and realistic expectations regarding the amount of sleep you will get.

3. Meals and Cooking:

- For the Pinecrest weekend, you will need a total of 3 meals - 2 lunches and 1 dinner, (and 2 breakfasts if you are staying at the PCC). Saturday morning doughnuts, bagels, coffee, and tea are provided at the start of class.
- Lunches need to be on-the-go style as there will not be time for cooking.
- NOTE: **Cooking is not allowed** in the Pinecrest Community Center at any time.
- For the Castle Peak field session, you will be responsible for providing your own breakfast prior to the start time, and bring a substantial lunch for a long day out.

4. Saturday Evening Meal:

- We will break for roughly 3 hours Saturday evening for dinner. You are on your own for dinner; typically students get together at a local restaurant.
- There are numerous options around Pinecrest to eat out. The following are some PNSP favorites:
 - Strawberry Inn: 31880 Highway 108, Strawberry, CA 95375
 - Steam Donkey Restaurant and Bar: Pine Crest Lake Road, Pinecrest, CA
 - La Morenita Restaurant: 30030 State Highway 108, Long Barn, CA 95335
 - Cafe 108 at Kelly's: 24181 State Highway 108, Twain Harte, CA 95383

5. Transport on Snow:

- We will conduct field sessions in the Pinecrest backcountry trail system throughout the first weekend. The Castle Peak field session will be conducted entirely in the field. Students must be equipped with either skis or snowshoes for cross-country travel over snow.
- Skiers are encouraged to use free-heel bindings (cross-country, telemark, or AT), and either use waxless-type touring skis or bring climbing skins.
- Snowshoes are recommended especially if you are not comfortable on skis. Bring ski poles and sturdy, waterproof boots if you are snowshoeing.
- If you are renting gear, pick up your gear and make sure it fits and works properly BEFORE class starts at 8am Saturday. Please contact the course instructors if you have any questions about renting gear.
- NOTE: Field sessions will take place in a backcountry, winter environment and weather patterns are unpredictable. Students must be equipped with appropriate clothing and gear to spend several hours in potentially cold and wet conditions. Please do not hesitate to contact the course instructors if you have any questions on appropriate gear.

Equipment

For the lecture sessions: dress comfortably to be in a classroom for the entire morning session. Bring a pen and paper for taking notes.

For the field sessions: dress to be outside, working, for the entire day. We will eat lunch out on the mountain, so pack a healthy lunch. Bring a backpack with enough room to carry your lunch, any personal equipment, and some extra room for group equipment we will ask you to carry. Avalanche work is strenuous activity requiring plenty of energy. Make sure you bring a good lunch and plenty of water with you. You are also likely to spend a lot of time in the snow, and are likely to get wet. Be sure you are equipped with the proper clothing to maintain comfort all day in cold, variable, and wet conditions.

We encourage participants to use their own equipment wherever possible, as this will improve their experience with that equipment. You are not expected to own all the equipment on this list, but if you have it or can borrow it, please bring it along. We have a limited supply of packable shovels and avalanche transceivers that we can loan to those who do not already own them. If you plan on purchasing one of these items, the classroom instruction and field trip will give you a chance to learn about several different options before making your purchase. You can use this page as a checklist.

Avalanche 1 EQUIPMENT LIST

Clothing (required): NO COTTON!!!

- ___ Long Sleeve Shirt/Sweater (*polypro, fleece, wool*)
- ___ Pants (*polypro, pile, wool, wool blend, ski pants*)
- ___ Warm Jacket/Sweater (*fleece, wool, wool blend*)
- ___ Long Sleeve Thermal Underwear (*polypro, wool*)
- ___ Beanie/Balaclava
- ___ Mittens/Gloves - 2 pair (*polypro, fleece, wool*)

Foul Weather Gear (required):

- ___ Waterproof/Water-Repellent Parka or Shell
- ___ Waterproof/Water-Repellent Pants or overalls
- ___ Waterproof/Water-Repellent Mittens or gloves

Footwear (required):

- ___ Ski Boots or well waterproofed Hiking Boots
- ___ Gaiters (*calf height*)
- ___ 2 pair heavy hiking/ski socks

Transport (required):

- ___ Skis (*backcountry touring with "Skins"*)
- ___ Snowshoes (*Bearclaw or similar small type*)
- ___ Ski Poles (*even if you are snow shoeing*)

Avalanche (bring it if you have it):

- ___ Avalanche Transceiver (beacon)
- ___ Avalanche probe
- ___ Snow shovel

Helpful Links

There is a plethora of good information on avalanche education and awareness available on the world wide web. Listed below are just a few websites that your instructors find particularly useful:

Avalanche Forecasts for various regions of California:

<http://sierraavalanchecenter.org> (Central Sierra, Tahoe area)

<http://www.esavalanche.org> (Eastern Sierra)

<http://shastaavalanche.org> (Mt Shasta)

Weather information

<http://www.wrh.noaa.gov/> (BEST detailed weather forecast site)

<http://www.nohrsc.nws.gov/> (Detailed snowpack data)

Incident reports and portal for other mountain regions:

<http://avalanche.org>

<http://csac.org>

Products and training information:

<http://fsavalanche.com/> (National Forest Service Avalanche Center)

<http://beaconreviews.com> (Comprehensive data on various beacons)

<http://www.backcountryaccess.com/english/research/index.php>

<http://www.youtube.com/user/AvalancheGuys> (Snow pit analysis videos - Montana)

Discussion forums:

<http://www.telemarktalk.com/phpBB/> (Go to Avalanche Safety Awareness Forum)

<http://www.tetongravity.com/forums/forumdisplay.php?f=17>