

Course Code & No. - Section: ODAL 380/280
Course Title (Credits): Special Topics: Backcountry Skiing and Snowboarding (3)
Term & Year: Spring 2016
Course Ref. No. (CRN): 10164

Instructor: Daryl Teittinen,
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Office: TCES 2nd Floor
Office Hours: By appointment

Class Meeting Time: Saturday-Friday March 14-20
Location: **Field: Backcountry locations within the High Sierra and Beyond**

Prerequisites (from Catalog): PHED 229; AIARE level 1 & Backcountry Skills
Corequisites (from Catalog): NONE

Course Description

This class builds on the AIARE level 1 curriculum. Over the course of six days of winter backcountry travel through avalanche terrain you will hone your avalanche knowledge. Students will refine their terrain selection and travel techniques, develop navigation and leadership skills, and practice avalanche rescue skills. Students can expect to be pushed physically and mentally, and to come away with solid backcountry travel skills.

FEE: \$500

Student Outcomes

1. Students will learn techniques related to safe and efficient backcountry travel, as well as methods for dealing with unforeseen accidents and problems.
2. Building on AIARE 1 knowledge, students will become proficient at recognizing avalanche conditions and terrain, and develop advanced travel skills to minimize exposure to hazard.
3. Developed solid companion rescue skills through participation in organized rescue drills
4. Developed leadership skills related to planning and implementing a backcountry trip through avalanche terrain. This encompasses all phases from; pre trip preparations to on hill hazard assessment, communication and group leadership.

Methods of Assessing Student Outcomes

Student outcomes will be assessed using the following:

1. Class Participation
2. Submission of a FIELD JOURNAL
3. Skills demonstrations
4. Paired/group activities
5. Peer feedback
6. Final Exam

Required Texts and Materials (see gear list below)

Required Texts:

- Backcountry Skiing: Skills for Ski Touring and Ski Mountaineering
Martin Volken, S Schell, M Wheeler. The Mountaineers Seattle WA
- AIARE Student Manual
- AIARE field book
- FIELD JOURNAL
- Readings

Resources:

Sierra Avalanche Center: <http://www.sierraavalanchecenter.org/>

Avalanche.org: <http://www.avalanche.org/>

AIARE: <http://avtraining.org/>

Weather: <http://www.weather.gov>

Class Requirements

Due to the experiential nature of this class, students are asked to **experience** all course material including discussions, problem solving, physical activities and the exchange of feedback. Sensitivity and attentiveness toward each group member's experience and the group's progress as a whole will be the responsibility of each group member. Days will begin early and run late. Students should expect to be fully enveloped in the learning expedition. Do not plan any other activities for the course days!

Grading Policy:

Participation is everything! Be prepared to be engaged from early on day 1 until late on day 6. Students will document all learning in a field journal format to be handed in for grading. The journal will be where students can take notes, make reflections, process learning, and show what they have learned. There will be daily quizzes and exercises to be completed in the field journal, as well as an exam.

Academic Accommodations: In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu or go to the OASIS offices on the third floor of Prim Library within the first week of the semester.

Class Schedule

| <i>Class Plan</i> | <i>Assignments</i> |
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| <p>Pre- Course: Prepare personal gear, fill out Participant Agreement and Medical History Form, READ: in Volken: Chapter 2. Read the rest of the text too!!</p> <p>Prepare Student Presentations (DUE Saturday and Sunday 3/14-15)</p> <ul style="list-style-type: none"> • Layering system and staying warm • Transceiver Use (batteries, system check, searching) • Topo Maps (Measuring up and down and distance) • Self Care on the mountain (nutrition, hydration, foot care, pacing, breaks, etc) • Weather update (seasons storm and weather history) <p>Day 1: Travel plan for day tour Hazard recognition and travel techniques Transceiver Practice</p> | <ul style="list-style-type: none"> • Pre-Class QUIZ • Tour Plan • Student Presentations • Checklists Article • Travel planning: Run lists • Daily Written Quiz • Expedition Behavior • Avalanche Rescue |

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| <p>Day 2: Trip planning, logistics, gear check, food buys, maps etc. Student Presentations! QUIZ on pre-course READING</p> <p>Day 3: Travel to field site, get established, initial snowpack and weather observations</p> <p>Day 4: Morning weather and hazard briefing Tour; tests on the move, group travel, speed and efficiency, leadership practice Gear Repair tactics</p> <p>Day 5: Morning weather hazard briefing Travel plan, leadership and route finding Tour; tests on the move, navigation, decision making, leadership, efficiency Evening; emergency response plan and practice</p> <p>Day 6: Morning weather and hazard briefing Travel techniques practice, group management, hazard recognition and avoidance Student led and planned tour</p> <p>Day 7: Final exam- beacon drills, written test</p> | <p>Scenario</p> <ul style="list-style-type: none"> • Risk tolerance Article • Field Journal • Student led tour • Final Exam |
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Please note that the schedule of class topics and assignments are subject to change. As outdoor enthusiasts, we are always POISED FOR CHANGE!

Equipment List

1. Personal Equipment

- a. Clothing for activities and standing in cold/snowy weather (no cotton)
 - i. long underwear
 - ii. insulating layers, including warm “puffy” overcoat
 - iii. outer layers (wind/waterproof- w hood!)
 - iv. warm gloves x2-3, mitts, headband, and hat
- b. Goggles and Sunglasses, sunblock
- c. 2 water bottles
- d. Pack (large enough for all equipment on day ski-tours)
- e. Mechanical pencil and spare, FIELD JOURNAL
- f. Overnight Gear:
 - i. Sleeping Bag/Pad
 - ii. Mug, bowl, spoon
 - iii. Headlamp
 - iv. Hut shoes: down booties, crocs, (lightweight and cozy)
 - v. Food (students will be in cook groups to prepare meals for class. PLEASE bring extra special treats for yourself beyond the provided food)
- g. Snow saw (optional)

2. Skiing Equipment

- a. Boots (touring boots recommended)
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- b. Clean and dry socks
- c. Skis with touring bindings (or touring adapters) and skins (please adjust bindings to boots and skins to skis before the course). Alpine touring or free-heel gear.
- d. Poles

3. Snowboarding Equipment

- a. Boots
- b. Collapsible poles
- c. Split Board with touring bindings and skins (please adjust bindings to boots and skins to board before the course) For students arriving at the course with snowboarding equipment, **split boards are recommended, as compared to traveling with snowshoes.**

OR

- d. Snowboard with snowshoes (with means of attachment to pack - have a system worked out before you come on the course). Please use blue loctite on all mounting screws.

Carrying a snowboard and using snowshoes will work, but is not recommended.

4. Safety Equipment (Transceiver, shovel and probe provided by instructor)

- a. Avalanche probe
- b. Collapsible shovel
- c. Avalanche transceiver (457 kHz frequency only. Digital preferred)
- d. Cell phone
- e. Camera!
- f. Small personal first aid kit (sunscreen/lip-balm, moleskin, band-aids, medication, etc.)
- g. Ski / snowboard repair kit (screwdriver with appropriate bits, spare screws, spare skin tips, spare pole basket, skin wax, epoxy, etc.)

5. Other/Optional (don't go buy this stuff if you don't already own it)

- a. Dial stem snow thermometer (graduated in degrees Celsius). Digital thermometers are acceptable but have limitations for snow profile work.
 - b. Grain identification card.
 - c. Magnifier (8x or 10x).
 - d. Folding rule graduated in centimeters, or probe with same. 2+ meter length.
 - e. Compass (Optional, compass with clinometer or bring separate clinometer)
 - f. Altimeter
 - g. GPS
 - h. Pocket knife or multi tool.
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