

## **RTM 151C Winter Mountaineering (2 units)**

Department of Recreation and Tourism Management  
California State University Northridge

**Redwood Hall 151 – Sat. 9:00-10:40**  
**Class Meetings on Jan 21 plus online sessions.**  
**Plus Field Location on January 28 (all day) and**  
**February 10-12 (all day)**

### **INSTRUCTOR:**

Office: Redwood Hall – Room 260

Office Hours: By appointment/ check website

Questions:

Phone: 818-677-

Website: [www.csun.edu/~](http://www.csun.edu/~)

### **COURSE DESCRIPTION:**

Advanced instruction in mountaineering and travel in the backcountry, with particular emphasis on snow and ice climbing (not vertical), avalanche prediction, physical effects of high altitudes and winter camping skills. Emphasis is on technique, proper use of equipment, environmental practices and safety. Arranged field trips are required.

### **COURSE OBJECTIVES:**

Departmental Student Learning Outcome #1:

“Students will demonstrate critical thinking including analysis, synthesis, and evaluation in the fields of play, leisure, recreation, parks, and/or tourism through a variety of pedagogies.”

At the conclusion of the course students should be able to:

1. Have an increased understanding and appreciation for the natural environment, and demonstrate minimum impact techniques (Leave No Trace) during backcountry travel (especially winter).
2. Be able to analyze weather conditions and preparedness of a group to make mature decisions regarding setting up camp, finding safer terrain or down climbing
3. Have an increased understanding of navigational skills in a winter mountainous environment
4. Assess and evaluate snow conditions regarding potential for avalanche
5. Synthesize factors of physiology and external conditions to make proper decisions regarding cold-related illness
6. Comprehend the effects of high altitudes on human physiology and the medical emergencies of HAPE, HACE & AMS
7. Apply winter travel techniques of snowshoeing and cross country skiing for safe navigation in the backcountry
8. Properly analyze environmental conditions and apply appropriate snow and ice climbing techniques for ice axe, crampons, roped travel, & crevasse rescue

9. Demonstrate appropriate levels of self-confidence, self-awareness and sensitivity to the needs of others in the group
10. Demonstrate appropriate decision-making skills for group safety during travel
11. Demonstrate knowledge related to environmental hazards in the backcountry environment and the related topics of warmth, fires, food, stoves, shelter.

## **COURSE CONTENT:**

- I. Introduction to general backcountry outdoor skills (non-winter as well as winter)
- II. Winter outdoor living skills
  - a. Outdoor equipment
  - b. Nutritional demands
  - c. Environmental practices
- III. Hazards of the winter environment
  - a. Hypothermia
  - b. Heat transfer mechanisms
  - c. Environmental physiology
  - d. Emergency responses
- IV. Avalanche
  - a. Prediction
  - b. Safe travel in avalanche terrain
  - c. Rescue techniques
- V. Travel in the winter environment
  - a. Snow-shoe techniques
  - b. Cross country ski techniques
  - c. Crampon climbing techniques
  - d. Orienteering review
- VI. Hazards of the high altitude environment
  - a. Environmental physiology review
  - b. Acute mountain sickness
  - c. High Altitude Pulmonary Edema
  - d. High Altitude Cerebral Edema
  - e. Emergency responses
- VII. Winter Shelters
  - a. Snow caves
  - b. Igloos
  - c. Emergency shelters
- VIII. Roped travel
  - a. Belay techniques
  - b. Ice axe/self-arrest
  - c. Crevasse rescue

## IX. Expedition planning

### **METHODS OF INSTRUCTION:**

1. Methodology: Lectures and experiential laboratory sessions will enable students to develop the skill competencies necessary for a safe outcome in travel in winter environments.
2. Schedule of Instruction: The class meets for 30 hours of instruction as a 2 unit class. The course is run in a non-traditional intensive format to maximize learning through experiential education methods. The class begins with face to face orientation and introductory lectures, followed by several on-line lectures (virtual class meetings), then there is a mandatory pre-field class meeting on campus, a one day field class, and finally the three day experiential class in a wilderness setting.

Class meeting information reviewed at top of the syllabus. First class meeting is face to face. The class then moves to either on-line class meetings and/or the face to face meetings of the field trip.

### **METHODS OF ASSESSMENT:**

#### Departmental Student Learning Outcome #1:

“Students will demonstrate critical thinking including analysis, synthesis, and evaluation in the fields of play, leisure, recreation, parks, and/or tourism through a variety of pedagogies.”

#### **A. Assessment Tools:**

- a. Embedded questions on final written exam and skill tests.
- b. Ability competency testing per certification standards where applicable

#### **B. Evaluation Tools:**

- a. Examinations: 50%
- b. Active Participation: 50%

**Text:** Mountaineering: Freedom of the hills. (2003). 7<sup>th</sup> edition. Seattle: The Mountaineers.

**Class Field Trip:** The specific weekends for the class trip is found on the first page of this syllabus. Because the trips encompass over 75% of the time in this class, attendance on these trips is **mandatory**. Make sure you are available from Friday morning to Sunday afternoon of the weekend corresponding to your trip and all day Saturday for the first field trip. If you have a commitment during the weekend trips, you will have to drop the class. Unfortunately, there is no way around this. **BE AWARE OF WHICH SECTION YOU HAVE REGISTERED FOR, AND MAKE SURE THAT WEEKEND FITS YOUR SCHEDULE!**

### **OTHER FIELD CLASS INFORMATION AND MISC CLASS POLICIES:**

#### **A. Grading Criteria**

1. The CSUN criteria for grading will be strictly followed including that an “A” represents “Outstanding” work and “an innovative application of the subject matter.” Refer to CSUN catalogue for additional details. Because class participation is such a significant part of the grade, attendance will be taken and

failure to attend all class sessions will compromise your grade. Failure to attend the weekend field class will result in a failing grade for the class.

2. An Incomplete ("I") is assigned only as specified by Instructor and upon consultation and approval of the Instructor. Incompletes are normally not permitted.

3. For Credit/No Credit grading, student must be doing passing work to receive "credit." Credit/No Credit grading option must be requested on SOLAR by the appropriate deadline.

**B. Students may not attend the field trip without review of the field trip information by the instructor prior to the field class. You must attend that class session.** In addition to being adequately prepared for the environmental demands of the field setting, students are required to complete a release form and insurance verification form PRIOR to the field class session.

#### C. Student Discipline

Inappropriate conduct by students (such as consuming alcohol on field trip and/or any other safety violation) is subject to discipline as provided in Sections 41301 through 41304 of Title 5, California Administrative Code. Refer to CSUN catalog for further details. The consequence for use of alcohol or illegal drugs in a field class is a failing grade for the class as drug use is inconsistent with our safety policy.

#### D. Field Trip Advanced Information about Equipment and Student Costs

More detailed information will be provided during the class to indicate what to bring, maps, and so forth for the required field class.

Travel: Students are encouraged to car pool for financial and environmental reasons. Student choices to car pool are the full responsibility of the students. PROOF OF CAR INSURANCE (if driving) is required by the university. Students should bring proof of insurance coverage to the pre-field class meeting in addition to their vehicle license plate number. Students can download the form provided on-line and bring that form to the pre-field class meeting.

Students must meet the instructor at the designated field site location identified in the pre-trip information. If students are late they will not attempt to locate the rest of the class in the wilderness nor are students allowed to depart from the field class experience early.

Detailed explanation of any personal gear necessary for the field experience will be reviewed in class and any university issued gear will be provided. Common personal gear for the field class could include:

Rain Gear/ Winter Boots/ Food / Water Bottles/ Clothes:

Loose-fitting & flexible wool or pile pants and shirts

Warm clothes (pile or wool sweater/ wind gear).

Winter bag/ Backpack/ Ensolite Pads/ ~~Skies~~ (can rent for minimal cost)

Sunscreen/ Sun glasses

#### D. Expenses the student can expect:

- Gas cost will vary depending on vehicle and current prices. Round trip travel to the field sites may be 300 miles. Costs will be reduced if shared with car pool.
- Campsite fees = could be from \$0 to \$25.00 per student depending on the final field class location.
- Food = students provide their own food for field trips so cost varies according to your taste.

- d. Equipment rentals = Students will be required to ~~rent cross country skis for the day field trip~~. The cost may be \$20. The longer weekend will be on snow shoes provided by CSUN. Winter sleeping bags may want to be rented though CSUN will provide all essential trip gear and specialty gear.
- e. Students may choose to provide their own backpack, sleeping bag, and other assorted camping gear though there is no obligation to provide these as CSUN can provide those for you.

**The Syllabus:** This syllabus includes a great deal of essential class information. Please read it first rather than sending an email asking questions that are easily answered in this document. Also check for other key documents posted at the class website.