

ADIRONDACK COMMUNITY COLLEGE
ADVENTURE SPORTS:
LEADERSHIP AND MANAGEMENT

COURSE: AVS 103 Introduction to Eastern Mountaineering

COURSE DESCRIPTION:

A comprehensive introduction to planning, managing, and leading mountaineering expeditions in the winter environment. This course expands upon AVS 101 and is designed to immerse students in the fundamental skills and knowledge necessary to professional preparation as outdoor and adventure leaders. This course will emphasize industry standards of practice, professional certification, the development and application of technical skills associated with winter travel, winter camping, eastern mountaineering, and planning, managing and leading winter expeditions, as well as snow physics and avalanche safety, cold weather survival and injuries, winter ecology, expedition risk management, backcountry navigation, Leave No Trace ethic for the winter environment, technology in the backcountry, and expedition leadership in the winter environment.

COREQUISITE: AVS 101

CREDIT HOURS: Lecture: 1 hr. Lab: 3 hrs. Credit: 2 hrs.

COURSE TEXTS:

Graydon, Don, and Hanson, Kurt. Mountaineering: The Freedom of the Hills. Seattle: Mountaineers Books. 1997.

Fredston, J.A., and Fesler, D. Snow Sense: A Guide to Evaluating Snow Avalanche Hazard. Anchorage, AL: Alaska Mountain Safety Center. 1994.

COURSE OBJECTIVE: Students will:

1. experience backcountry travel techniques in the alpine environment
2. develop a kinesthetic awareness of mountaineering technique
3. perform basic mountaineering and cold weather survival techniques, safety skills, and rescue fundamentals
4. evaluate risk management plans and assess hazards
5. interpret the alpine and mountain environment and apply environmental ethics
6. understand and evaluate the mountaineering expedition planning process
7. demonstrate the use of equipment and technology
8. understand thermoregulation, physiology, and nutrition in the alpine environment

COURSE CONTENT:

- I. Introduction
 - A. Risk mitigation, safety management, and hazard assessment
 - B. History
 - C. Alpine environment
 - D. "Leave No Trace" considerations
- II. Equipment
 - A. Personal equipment
 - B. Group equipment
 - C. Safety equipment

- D. Care
- E. Use and Techniques
- F. Technology
- III. Safety Considerations
 - A. Thermoregulation, physiology, and nutrition in the alpine environment
 - B. Hydration
 - C. Health and safety
 - D. Personal and group hygiene
 - E. Water purification
 - F. Navigating varying terrain
 - G. Rescues, emergency and first aid management
 - H. Hazard assessment, risk mitigation, and emergency and safety management
 - I. Variables
 - i. Human
 - ii. Environmental
 - iii. Equipment
 - iv. Organizational
- IV. Environment
 - A. Topography, ecology, geology, and characteristics
 - B. Ethics
 - C. Waste
 - D. Leave No Trace
 - E. Weather forecasting
 - F. Natural interpretation
 - G. Flora and fauna
 - H. Astronomy
 - I. Land use
 - J. Impact
- V. Expedition
 - A. History
 - B. Culture
 - C. Weather
 - D. Assessing the objective
 - E. Geography and topography
 - F. Hydrology
 - G. Navigation
 - H. Risk
 - I. Research
- VI. Planning
 - A. Logistics
 - B. Equipment
 - C. Food and supplies
 - D. Medical
 - E. Risk management
 - F. Route selection and evaluation
 - G. Mountaineering strategies
 - H. Camp management
- VII. Review, Reflection, and Assessment
 - A. Skills assessment
 - B. Safety considerations
 - C. Service learning project
 - D. Environment

- E. History
- F. Culture

ADDITIONAL RESOURCES:

American Alpine Club. Accidents in North American Mountaineering. Golden, CO: The American Alpine Club, Inc. 2005.

Cutis, Rick. The Backpacker's Field Manual: A Comprehensive Guide to Mastering Backcountry Skills. New York: Three River Press, 1998.

Drury, J. K., Bonney, B. F., Berman, D., & Wagstaff, M. C. The backcountry classroom: Lessons, tools, and activities for teaching outdoor leaders. Falcon Guide: Guilford, CT, 2005.

Jenkins, Jerry and Keal, Andy. The Adirondack Atlas: A Geographic Portrait of the Adirondack Park. Syracuse, NY: Syracuse University Press, 2004.

McGivney, Annette. Leave No Trace: A Practical Guide to the New Wilderness Ethic. Seattle: Mountaineer Books, 1998.

Schneider, Paul. The Adirondacks: A History of America's First Wilderness. New York: Henry Holt and Company, LLC, 1998.

Terrie, Philip G. Contested Terrain: A New History of Nature and People in the Adirondacks. Syracuse, NY: Syracuse University Press, 1997.

Tilton, Buck. Backcountry First Aid and Extended Care. Connecticut: Globe Pequot Press, 1998.

Weiss, Eric A. A Comprehensive Guide to Wilderness and Travel Medicine. Partners Publisher Group, 1998.

ADDITIONAL INFORMATION:

With or without reasonable accommodation, all students must be able to:

- Navigate difficult and varying terrain in the mountain, aquatic, challenge course, and alpine environments.
- Lift and carry heavy loads that often exceed 50lbs. over difficult and strenuous terrain.
- Walk, paddle, climb, and hike long distances carrying substantial weight.
- Assist in rescue efforts which may include lifting, climbing and carrying substantial weight over difficult and varying terrain.

Under Section 504 of the Rehabilitation Act of 1973, a post-secondary student with a disability who is in need of academic accommodations or auxiliary aids is required to notify the College of the nature of the disability and to provide appropriate documentation which supports the request for reasonable accommodations or auxiliary aids.

Individuals who would like to self-identify with a disability (and have not already) or think they may have a disability and want to request accommodations should contact the Office of Accessibility Services directly in Warren Hall, or call 743-2282 / (TTY) 743-2323 for an appointment.

