Outdoor Studies OUT 168 Avalanche Awareness I

Course Information

Instructor: John MacKinnon, Outdoor Education- Adjunct Faculty Cell # 970 236 6130 Email: john.mackinnon@rrcc.edu John's Office Hours: by appointment only

Dates: 1/27/17-1/29/17 8 am – 6 pm

Required Text: AIARE Student Manual. (Instructor will provide on Day 1 of the course)

Recommended Text: Fredston, J., Fesler, D., Birkeland, K. & Chabot, D. (2011). *Snow Sense: A Guide to Evaluating Snow Avalanche Hazard [5th Edition]*. Alaska Mountain Safety Center, Inc. ISBN - 978-0615499352

Class Structure: The class will utilize lectures, handouts, reading assignments, fieldwork, demonstrations, and videos where appropriate for the presentation of course material.

Class runs from January 27th to January 29th. Class begins at 8 am and finishes up around 6 pm. You can rent avalanche rescue gear (avalanche beacon, shovel, and probe) and snowshoes from RRCC if you do not have a backcountry ski or splitboard set-up. If you bring skis or a splitboard make sure you have skins that fit your boards. It is also OK to use snowshoes and carry a snowboard.

You will also need appropriate winter clothing and a backpack that can carry all your gear—that includes avalanche rescue gear and snowboards. I would recommend bringing ski poles if you are on snowshoes or a snowboard. Please contact me if you have any questions.

A. Class Overview

- a. Day 1 will mostly be in the classroom. We will be outside around campus for 1-2 hours. You won't need ski/ride gear for Day 1 but you will need to dress appropriately to be outside on campus. You will need avalanche rescue gear—beacon, shovel, probe—and a backpack for Day 1.
- b. Day 2 and Day 3 will mostly be in the field. Dress appropriately! You will want to pack enough snacks, water and hot drinks to stay warm and comfortable for up to 8 hours in the field.
- B. Evaluation Methods and Class Management Student evaluation and grading will be based on:

Criteria Points

FIELD NOTEBOOK:	30 - complete, professional, accurate
WRITTEN SKILL EVAL:	40 - multiple choice test
PARTICIPATION:	30 - awake, active, engaged (5) & timeliness (5) for
	10pts/day

100 points total available

Note on Attendance/Participation: Active participation in class is expected. Please call or text the instructor if you are running late. **Due to the short nature of this course, students who miss more than 4 hours of class will not be allowed to complete the course; they must withdraw as soon as possible to prevent receiving a failing grade.**

Policies:

- A. All electronic devices (phones, pagers, texting devices, MP3's (and such) must be turned off at the start of class each day. In-class use your computer must be limited to class notes, assignments, or research.
- B. There is no smoking during class, nor on the field trips (during official class times or meeting times, even impromptu meetings, or a teachable moment). Drugs or alcohol are not permitted at any time as per the RRCC Student Handbook.
- C. Physical Fitness and well-being is a standard part of these courses. Any concerns about your current level of fitness or ability to participate in physical education, outdoor education or park ranger courses should be addressed with you instructor and the program chair after receiving this syllabus.

Course Description:

Emphasizes the latest information available about the study of avalanches, snow science, rescue equipment, and rescue techniques. Provides students with the knowledge and skills necessary to help instill good judgment and sound skills when making day-to-day travel decisions in the winter environment.

This three day avalanche safety course follows the *AIARE 1: Decision Making in Avalanche Terrain* curriculum. The course focuses heavily on decision making, choosing appropriate terrain, and understanding avalanche problems. Students will also spend time in snow profiles performing snowpack tests and learn the basics of companion rescue. Students leave the course with the tools to safely plan and carry out a trip in the wintertime.

This is a must class for anyone wanting to venture into the winter backcountry environment of the Rocky Mountains and a prerequisite for any aspiring backcountry ski and mountain guide. Students will receive a certificate of completion stating that the course was taught following the guidelines of the American Avalanche Association and the American Institute for Avalanche Research and Education.

Student Learning Outcomes, Competencies, and Skills*:

- Describe the nature of avalanches and their dangers.
- Recognize safe and unsafe terrain.
- Understand the elements of snow metamorphism.
- Conduct a stability analysis using snow pits and external conditions.
- Know how to avoid avalanches.
- Know how to behave if caught in an avalanche and know how to rescue an avalanche victim.
- Organize and conduct a backcountry avalanche rescue operation using standard rescue equipment.
- Develop a plan for travel in avalanche terrain.
- Demonstrate the ability to identify avalanche terrain.
- Effectively use a decision-making framework to make terrain choices in a group setting.
- Demonstrate effective companion rescue.
- Have an understanding of the day's "avalanche problems."

The AIARE Curriculum Specifically Addresses:

- Decision making.
- Avalanche types and their characteristics.
- An introduction to how avalanches form and release.
- Trip planning and prep.
- Gathering relevant avalanche, snowpack and weather observations.
- Avalanche terrain recognition, route assessment, and selection.
- Travel techniques, group management, and risk reduction
- Teamwork and communication as effective measures to mitigate human factors during each stage of planning and decision making.
- Companion rescue.

*Adapted from Page 7 of the AIARE Student Manual

Topics for each Class

Date	Topics	Reading	Assessments	Location
Friday	Introduction to AIARE and	TBD	None Due	RRCC
1/27/17	Decision Making			Campus
	Avalanche Fundamentals			
	Introduction to Companion			
	Rescue			
	Managing the Human			
	Factor			
	Reading the Bulletin			
Saturday	Companion Rescue	TBD	Check the	St. Mary's
1/28/17	Continued		CAIC Bulletin	Glacier Area

	Observation and Clue Gathering Field Session		for the Front Range	
Sunday 1/29/17	Trip Planning Intro Trip Planning Terrain Tour Course Close Test	TBD	Test Hand in Blue Books	St. Mary's Glacier Area

Academic Integrity

Everyone associated with the college's academic community has a responsibility for establishing, maintaining, and fostering understanding and respect for academic integrity. The following principles are associated with academic integrity:

- Cite (give credit for) words and/or ideas in an academic exercise that are not expressly your own.
- Use information, computer programs, another person's work, study aids and/or other

materials only when allowed by the instructor.

- Remove materials from the library, labs, and other college facilities only when an official representative of the college grants permission.
- Use copyrighted materials only with permission.
- Refuse to help another commit an act of academic dishonesty.
- Use only the resources specifically allowed when completing a test or other assignment.

Academic dishonesty is the intentional act of fraud when an individual claims credit for the work of another, uses unauthorized materials, or fabricates information in any scholarly exercise. Academic dishonesty also includes, but is not limited to:

- forging educational documents
- damaging or destroying the works of another; or
- assisting others in acts of academic deception.

If you are aware of an incident of academic dishonesty, please report the occurrence to a faculty member, department chair, or administrator. Those committing academic dishonesty will be subject to disciplinary action, such as failing the assignment or course and/or expulsion from the course or college.

Disabilities

RRCC offers many special services to students with disabilities. The college complies with and fully supports Section 504 of the Rehabilitation Act of 1973, with amendments of 1974, as well as the Americans with Disabilities Act (ADA) of 1990 regarding non-discrimination based on disability.

Reasonable accommodation is provided upon request for persons with disabilities. If you require an accommodation to participate in any class, program, service, or other activity at RRCC, contact the Office of Disability Services (ODS).

No accommodations will be accepted after the due date for any required assignments, attendance, or fieldwork.

Information: 303.914.6733 or 303.914.6737 TTY

Affirmative Action/Equal Opportunity

RRCC is committed to diversity in its people and programs. The college is an equal opportunity educational institution and does not discriminate based on race, color, religion, national origin, sex, sexual orientation, gender expression, age, veteran status, or disability. It also does not tolerate acts of ethnic intimidation, which are any unlawful acts against persons or groups because of race, color, ancestry, religion, or national origin for the purpose of inciting and provoking bodily injury or damage to property. The State Board for Community Colleges and Occupational Education has approved the RRCC Affirmative Action/Equal Opportunity Program Plan (available for individual, public, and agency review in the Personnel Office). The college has designated the Director of Personnel as its affirmative action officer.