

**Sierra Avalanche Center
Avalanche Level 1 for Motorized Users
Course Syllabus**

Course Summary

This +24hr course introduces avalanche risk management to recreational motorized users. Learning will occur through pre-course reading and videos, a brief classroom session, and three days of field practice. This course follows the guidelines for Recreational Level 1 Avalanche Training as established by the American Avalanche Association.

Schedule

All three days will run from 9am-5pm. The first day will begin with a classroom session before transitioning to the field. The following two days will be entirely in the field. Instructors will communicate specific plans prior to and throughout the class. Attendance and participation in the full class is mandatory.

Course Requirements

Participants must:

- Be able to ride off-trail in variable conditions. The majority of a Level 1 class will occur off-trail. Participants who struggle to ride off-trail in variable conditions may jeopardize the experience of others - please do not overestimate your riding ability.
- Bring a functioning beacon, shovel, and probe. Beacons should be [modern three-antennae](#), shovels should be made specifically for avalanche rescue, and probes should be 270cm or longer. Avalanche gear must be worn/carried on self, and not in tunnel bag. An extra shovel in tunnel bag is recommended.
- Wear a DOT or similarly approved helmet and weather-appropriate gear.
- Ride a reliable, well-maintained snowmobile/snowbike, capable of off-trail travel. Machines must be registered with visible registration markings. Spare belts and repair kits are strongly recommended. Poorly maintained machines and/or machines not intended for off-trail travel may jeopardize the experience of others.
- Read the required materials prior to the first day of class and apply the Daily Flow and Alerts stickers to machines for easy reference while riding.
- Bring a radio capable of operating on [FRS/GMRS frequencies](#).

Text and Materials:

- The [SAC Daily Flow](#) user guide and videos.
- Daily Flow and Alerts stickers, available for free at most regional powersports dealers. Additional stickers will be provided in class.

Learning Outcomes

The successful student will:

- Become familiar with the structure and oversight of avalanche education in the U.S.
- Recognize common themes in general risk management systems and recreational risk management for avalanches.

- Demonstrate familiarity with rescue gear, including completion of a simple, untimed companion rescue scenario.
- Consider the qualities of riding partners as they relate to risk; including both avalanche and non-avalanche risk.
- Describe basic relationships between conditions, terrain, and avalanches.
- Access the SAC advisory and relate the danger rating, avalanche problem, and “Bottom Line” to potential avalanche risk.
- Based upon riding partners and anticipated conditions, create safety margins using terrain and/or timing.
- Confirm details with riding partners and use a repeatable process to plan each riding day.
- Manage the riding group using communication techniques and spotting/spacing strategies for both non-avalanche and avalanche terrain.
- Use the SAC Conditions and Terrain Alerts stickers to maintain awareness of conditions and terrain while riding.
- Recognize the benefits of digging below the snow surface – including use of small and large column snowpack tests - for increased awareness of the day’s conditions, and for contributing to lifelong learning.
- Participate in group discussions that link agreed upon safety margins with observed conditions and terrain use.
- Encourage partners to learn from each day by using daily debriefs.
- Submit observations to SAC using non-technical language and/or images and videos.
- Recognize the limitations of a Level 1 class, and the perishable nature of skills learned. Identify next steps in avalanche education and related fields for lifelong learning.