For scenarios 1 & 2, list & explain the many good and bad decisions that the groups made. For scenario 3, write out your response as though you were telling it to your own group. Feel free to do the worksheet on your own, but discussing the scenarios with others may facilitate learning. You MUST, however turn in your own response.

The due date is (see syllabus). There is no class on this date, so turn in your assignment to Dan’s office. If I’m not in, slide it under the door. LATE SUBMISSIONS WILL NOT BE GRADED!

SCENARIO ONE
Two experienced backcountry skiers left the Devil’s Lake trailhead on April 3rd at 07:20. Their objective for the day was to ski the south side of South Sister in the Three Sisters Wilderness of central Oregon. While skinning up the volcano, they took several opportunities to jump on and ski cut across several test slopes. Most of these tests yielded snow fracture and release. Once at the summit, they rested for almost a half an hour and weighed their options. Figuring that their test slopes only slid because they were all facing to the southwest, they opted to ski more to the southeast on their descent back to the car. They did not dig a snowpit to evaluate the snowpack characteristics. Choosing to expose only one skier at a time, Skier 1 skied first over the convex roll off of the summit, out of sight from Skier 2. Listening for a signal that it was OK to proceed, Skier 2 waited, but heard nothing. Skier 2 became impatient and went to look over the roll when the snow fractured and began to slide down the mountain. Being just at the top of the avalanche, Skier 2 managed to dig in to the bed surface and self-arrest. Once the avalanche stopped, Skier 1 was no where to be seen and there was no reply when Skier 2 shouted for her. Skier 2 immediately set his transceiver to “receive”, only to find that the batteries had died sometime during the climb, because they had been working in the morning. Having no probe, assuming that his shovel was useless and not knowing what else to do, Skier 2 left the scene to go for help.

Skier 1 was found dead five days later when the weather had cleared enough for rescue crews to arrive.

SCENARIO TWO
Four backcountry skiers awoke at mid mountain on Mt. McLaughlin in the southern Oregon Cascades on the 12th of May. Five inches of relatively wet snow had fallen over night and they could not have been more excited to ski the mountain’s NE facing bowl. The new snow had fallen on a 10-day old melt-freeze crust. During the climb up, the group took several opportunities to observe how well the new snow was bonding to the crust. All tests were indicating that the new layer was bonding well, and that the bonding was improving as the temperatures rose. Once at the summit, the group ate lunch and then descended into a safe spot in the bowl to perform more stability tests. They felt very comfortable with the degree of bonding that they found between the new layer and the crust, but did not bother to look any deeper. Skiing one person at a time with all others watching, everything was fine until Skier 3, who was the designated group leader, triggered a slab avalanche near the top of the bowl. The slab released on a layer of surface
hoar two and a half feet down that had persisted for over three weeks. Skier 3 was one of the two people in the group that had transceivers. All members of the group were equipped with probes and shovels. There was no designated secondary group leader. Skier 4 used his transceiver to look for Skier 3, but heard no signal. Skiers 1 and 2 performed hasty searches in the proper fall line. Skier 2 found a boot at the surface and dug a little bit to find a leg attached to it. She yelled out to the others and they had the buried victim out in minutes, shaken but alive and ambulatory. Skier 4 still had no signal on his transceiver, and it was at this time that he realized that the transceiver he had borrowed was of the old frequency.

**SCENARIO THREE**

A winter storm is currently affecting the Sierra range of California. You are the leader of a climbing party that has made camp 800 vertical feet short of the summit on Mt. Dana, a 13,000 ft. peak in Yosemite National Park. The Sierras are considered to be a maritime snowpack. The storm began around 5:00 in the morning at a temperature of 12 degrees Fahrenheit and was dropping at least 1 inch of light snow per hour. Later, at 10:00 AM, the temperature was 27 degrees Fahrenheit. The storm was showing signs of letting up soon, though it was ambushing you with 2 inches of snow per hour. Now, at noon, the storm has stopped and it is 31 degrees. A total of 8 inches fell and there was little wind associated with the storm. Before the storm, you and your group considered the snowpack to be stable. Having this information, you brief your climbing partners on what kind of snow and avalanche conditions to expect from this snowfall, if you think that today should be a rest day or a summit day and why. Consider as many factors as possible factors because you will have to justify your decision well to your group. Please write your response.