Your final project will be to research, and then teach with a group of your peers, one of the five topics listed below. The groups/topics will be selected at random, and you will have 30 minutes total to cover the topic as your group chooses. There are no hard guidelines in respect to presentation/teaching style, and we encourage you to get creative! It does not have to be a standard lecture format unless you feel like that is the most effective way to teach the topic. We will already have covered these topics in class so feel free to go more in depth, or branch out.

While the presentation is a group activity, each person will need to prepare a lesson plan for the lesson as a whole, and carry out independent research on the broader topic, or a selected subtopic (e.g. dust on snow would be a subtopic under snow energy balance, near surface faceting could be a subtopic under dry snow metamorphism). The lesson plan should cover the full lesson, but can be personalized to focus on each individual’s contribution. The outcome of the independent research will be a 3-5 page research paper, incorporating a minimum of 3 peer-reviewed journal articles for sources (Google Scholar is an excellent resource for exploring and finding peer reviewed research). Papers should be written in 12 pt font, 1.5 spacing, with regular margins.

**Topics**

Snow Energy Balance and Heat Transfer
Dry Snow Metamorphism
Wet Snow Metamorphism
Mountain Meteorology
Snow Mechanics

**Deliverables**

- Group teaching the class for 30 min
- Individual Lesson Plan (more on lesson plans)
- Individual Research Paper (more on research papers)

**Grading**

10% Interaction, planning, and execution with group
10% Lesson Plan
40% Group presentation and attending other group presentations
40% Research Paper

Questions about the final project? skiles.mckenzie@gmail.com

“While we teach, we learn” - Roman Philosopher Seneca