

Snow and Avalanche Dynamics, Spring 2017  
Group Teaching Final Project  
Guidelines and Grading

Your final project will be to research, and then teach with a group of your peers, one 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](mailto:skiles.mckenzie@gmail.com)

*"While we teach, we learn"* - Roman Philosopher Seneca