

Mountain Weather & Climate

ATMO - 2200 001

Course Student Learning Outcomes

- Construct a model, using evidence, of how Utah's geography and topography controls local and regional climate. Illustrate using multi-media communication the meteorological or climatological underpinnings of a mountain weather phenomenon. Predict mountain weather, and communicate this prediction, utilizing meteorological datasets and analytical skills.
- Differentiate past and present mountain climates, and their weather, throughout the world using meteorological, climatological, geological, ecological, and hydrological data.
- Synthesize the impacts of climate change on mountain weather, climate, and ecosystems. Apply meteorological records to variations in snowpack structure and snow avalanche activity.
- Develop scientific questions related to mountain weather and climate and discriminate which are feasible to answer with available resources, tools, and data. Design a research methodology utilizing background research, available datasets, and analytical skills.
- Collect, interpret, and analyze data that follows a research methodology designed to answer an accessible scientific question. Justify conclusion from result of data analysis, identifying assumptions and limitations, and develop additional related scientific questions.
- Generate an oral and poster presentation of a research project that is professional, thorough, and clearly understandable to a wide audience.

Additional Materials

The textbook is available a [free ebook through the library at this link](#).

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
8/31/25	CQ-0: Student Survey - MANDATORY	Quiz	2
8/31/25	Degreeworks Audit & Plan	Assignment	2
8/31/25	HW-0: Career Exploration	Assignment	4
9/7/25	R-1: Project Topic & Draft Abstract	Assignment	10

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

[Advising and Counseling Support Services](#)

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

[Student Academic Calendar](#)

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)