

# Severe Weather (PS)

ATMO - 1010 001

## Course Description

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This course introduces the fundamentals of the atmosphere with a focus on severe and hazardous weather, including impacts on human activities and the environment. Severe weather topics will be used to explore our dynamic atmosphere, including hurricanes, thunderstorms, tornadoes, snowstorms, and more.

Semester: All

## Course Student Learning Outcomes

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- Describe the basic properties of the atmosphere and explain their values and behavior.
- Outline the properties of moisture in the atmosphere and apply to precipitation formation.
- Diagram force balances in the atmosphere and relate to observed winds.
- Identify airmasses and illustrate frontal boundaries.
- Discriminate the impact of mountains on snow and windstorms.
- Differentiate between meteorological measurements and collect meteorological data.
- Model atmospheric stability and identify in meteorological data.
- Interpret climate data and distinguish weather from climate.
- Analyze weather maps and information, synthesize data, and formulate a weather prediction.

- Collect meteorological data to analyze and forecast ice storms and lake-effect snowstorms.
- Assemble meteorological data to describe and forecast thunderstorms.
- Differentiate tropical cyclones from extratropical and evaluate storm impacts.
- Explain the relevance of severe and hazardous weather to human societies.
- Examine extratropical cyclones and appraise their human impacts.
- Model tornado formation and assess the human impacts of tornadoes.
- Demonstrate the relevance of weather to your future career and reflect on learning.
- Analyze the accuracy of weather as depicted in popular media.
- Describe hail and lightning formation and justify safety guidelines.

## General Education Information

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This course fulfills the above requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning.

General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

## Assignment Schedule

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Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Introduce Yourself</a>	Discussion	0
8/31/25	<a href="#">Getting to Know You!</a>	Discussion	2
8/31/25	<a href="#">Student Survey - MANDATORY</a>	Quiz	2
9/7/25	<a href="#">CQ-1: The Atmosphere + Global Weather</a>	Quiz	2
9/7/25	<a href="#">HW-1: The Atmosphere</a>	Quiz	4
9/21/25	<a href="#">P-1: Weather in the Movies.[PLO-EES-5]. GE Signature Assignment</a>	Assignment	20

## Institutional Policies

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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

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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](#)

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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](#)

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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](#)