

syllabus

Course Title:

ATM S 101: Weather

Course Goals:

- (1) Understand why there is weather and how it takes place.
- (2) Become literate in meteorology to follow weather discussions on TV or radio, in the newspaper or online.
- (3) Practice critical reasoning and learn the scientific method.
- (4) Get a glimpse of cutting-edge atmospheric science and understand key environmental issues related to weather.

Course webpage:

<http://www.atmos.washington.edu/2010Q3/101/>

Contact:

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My email: bsmoliak@uw.edu

My office: Atmospheric Sciences and Geophysics* (ATG) 522

**Enter through one of the two entrances on the south side of the building*

Class period:

9:40–10:40am, MTWThF
Sieg Hall, 227

Office Hours:

Wednesday, 11am–12pm (ATG 420)
Thursday, 3:30–5pm (Cafe Solstice on the Ave)

Required Textbook:

Essentials of Meteorology, 5th Edition, by C. Donald Ahrens

Readings are listed on the Schedule portion of the course webpage and should be done prior to or during the week in which their topics are being covered in lecture.

Course structure:

Lectures will be given daily. Experiential learning will be incorporated through demonstrations in the classroom and outside around campus, weekly weather discussion, and an informal forecast contest.

There will be 4 assignments, 5 quizzes, and 1 final exam.

- The format and character of the assignments will vary and focus on course objectives.
- The quizzes will generally combine multiple choice, T/F, and short answer questions.
- The final exam (cumulative) will take place during the last two class periods.

Course schedule:

Week 1: Introduction to the atmosphere. *Assignment #1: (Writing) Personal weather narrative*

Week 2: Heat, radiation, and equilibrium. *Quiz #1*

HOLIDAY - MONDAY, JULY 5 - Independence Day

Week 3: Varying weather in time and space. *Quiz #2*

Week 4: Clouds and precipitation. *Assignment #2: (Drawing) Observation and analysis*

Week 5: Winds, fronts, and weather systems. *Quiz #3*

Week 6: Forecasting. *Quiz #4*

Week 7: Severe weather. *Assignment #3: (Presentation) Weather briefing*

Week 8: The general circulation. *Quiz #5*

Week 9: From weather regimes to climate. *Assignment #4: (Reading) Weather discussion*

Week 10: Wrap up. *Final Exam / Day 1: Short answer, essay. Day 2: Multiple choice.*

Assignments/Quizzes will be due on/held on Friday of their respective weeks.

A study guide will be available at the end of week 8; optional problems will be suggested throughout the course on a weekly basis.

Grading Summary:

My philosophy - In cases of small class size, I believe an absolute, criterion-based grading scale is most fair. I will not grade on a curve. There will be a total number of points for each category below; your percentage in each will be weighted by the distribution indicated, summed, and used to assign a grade in line with the standard UW grading system.

Breakdown - Assignments*: 40%
 Quizzes**: 20%
 Final: 40%

*Late assignments will be accepted for a grade, though it is in your best interest to hand them in on time. The last day late assignments will be accepted is Monday, August 9th. Assignments may be turned in via a hardcopy or through the course webpage (*NOT* via email).

**Quizzes will be in-class only and thus may not be made up, except in *extreme* circumstances. Contact the instructor ahead of time if you anticipate such a situation. Your lowest quiz grade will not count toward your final grade. Thus, you may miss one quiz without undue penalty.

N.B., You cannot not be graded on whether or not you speak up in class, though active participation will be encouraged. You cannot not be graded on whether or not you achieve perfect attendance, however frequent absences will manifest themselves in obvious ways. You cannot not be graded on your personal conduct, though disruptive behavior will not be tolerated.

Personal Conduct:

To ensure a positive and engaging classroom environment suitable for learning, the following behavior will not be accepted in the classroom:

- Use of cellphones for voice calls or any form of text messaging.
- Use of computers for any purpose other than note-taking or coordinated in-class activities.

Strategies for success:

Attend class. Sit in front. Ask questions: in class, after class, in office hours. Try the suggested problems each week and bring difficulties to office hours. Check tomorrow's forecast every day.