

De Anza College
Physical Science, Mathematics & Engineering Division
Meteorology 10, Weather & Climate Processes

Section(s):	24286 and 24287 Fall 2017
Instructor:	Terrence J. Mullens (Preferred Pronouns: He/Him/His)
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Office Location	S48A
Office Hours:	M-Th: 2:40-3:20pm, F: 11:30-12:20pm
Class Days/Time:	M-F 10:30-11:20am (24286), 1:30-2:20pm (24287)
Classroom:	FOR 1 (24286), TBA (24287)
Prerequisites:	None (Some basic math skills may be helpful)

Introduction

This syllabus is like the “Terms of Service” that you agree to when you download iTunes or anything else off the internet. However, this is much shorter and I actually expect you to read it! Our first quiz will be heavily based off of it! Your continued enrollment is your agreement to abide by the terms and conditions outlined in this syllabus.

Course Description

Welcome to the wonderful world of Weather! This course will cover all of the fundamental concepts behind the weather we see in our everyday lives. This includes atmospheric structure/composition, heat and radiation, forces that affect wind, humidity, atmospheric stability, precipitation and clouds, extreme weather and climate change. We’ll also cover areas of interest such as the California Drought, El Nino/La Nina, and potentially any major weather events that occur during the quarter.

Course Website

Everything you need for this course (Syllabus, Handouts, Lectures, etc.) can be found on the course page which can be accessed through Canvas.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Analyze and explain the objective techniques used by synoptic meteorologists and climatologists to forecast our planet's weather and to predict future changes in our planet's climate.
2. Assess and critique the impact of meteorology and climatology as sciences on local, national and international economic, environmental, ethical and political issues including climate change.

Recommended Textbook and Course Materials:

“Essentials of Meteorology” by C. Donald Ahrens 7th edition (older editions are fine!)

Contacting Me:

If you need to get a hold of me for any reason, please email me at mullensterrence@fhda.edu. I check my email often during business hours, less often at nights/weekends. If, you do not hear from me within 24 hours, please re-send your email.

In the Classroom/Class Rules

Respect: I expect everyone to respect me and everyone else! This means that I will not tolerate commotion between neighbors or any activity that is disruptive. I will give you ONE warning and then ask if to leave if any of the above issues happens again (if this happens, you also lose any participation credit for the day).

Cell Phone Policy: If I catch you browsing on your phone during class, I will ask you to leave for the day, and you will forfeit any in-class assignment points for that day.

Issues/Grievances: While I try my best to make this class a positive learning environment, there is always the chance that either something I or someone else in class does might not sit well with you; if that is the case, I am more than happy to hear any grievances in private. I've found that 99.9% of any issues that arise are easily settled (and to everyone's satisfaction) by a brief conversation.

I reserve the right to drop any student who is consistently causing disruptions and problems in class!

Attendance/Punctuality: Attendance will be taken in each class session via an in-class activity. Sometimes, these activities will be at the beginning of class while others will be near the end, or anywhere in between. If you are not present for the activity, you cannot make it up, regardless of reason. While most (if not all) class sessions will end on time, there may be a time or two where class runs a minute or two late. If you must leave immediately at the scheduled end time, you are more than free to do so without penalty. However, I ask that if you must leave, that you do so quietly and respectfully.

Assignments and Grading

Student Survey...	25 pts
Course Reflection...	25 pts
In-Class Activities...	200 pts
Homework Quizzes...	100 pts
Class Project...	100 pts
Midterm Exams (2 @ 100 points each)...	200 pts
Final Exam...	150 pts
Total...	800 pts

Grading Scale:

>720 = A, 640-719 = B, 520-639 = C, 440-519 = D, < 440 = F

+/- grades will be assigned when a grade is within 16 points (2%) of the next grade level

Note: I reserve the right to adjust this scale, but only to benefit you.

In-Class Activities: Throughout the quarter, we'll be doing numerous in-class activities totaling approximately 20 points each week. These activities include group and individual assignments that will build on in-class discussions.

Homework Quizzes: Each week, we will have a quiz based on assigned videos/review sheets. These quizzes will be assigned and completed online through the Canvas Learning Management System.

Exams: There will be three midterm exams on the last day of weeks 3, 6, and 9. The exams will consist of multiple choice/true-false questions, fill in the blank questions, and several short answer questions. You'll need 4 scantron 1712-PAR Sheets.

Class Project: A group project covering a topic chosen by you will be assigned on Week 7, with presentations during Week 11. This is your opportunity to explore a topic interesting to you and to present it to the class. More details will be given after Exam 2.

Late Work/Makeup Policy: Any Exam Makeups need to be arranged with me in advance, and will result in a 20% deduction (20 points for an exam), regardless of reasons. Otherwise, I will NOT grant any makeups! Makeups for in-class assignments are granted only when the absence was due to a documented emergency.

Returned Work: Once I return an assignment to you, it is your responsibility to hold on to it until the conclusion of the quarter in case a mistake is made with your final grade.

Dropping

I will drop you if:

- You miss more than 5 class sessions –or–
- You miss more than one midterm exam

Otherwise, if you choose to drop the class, you must do so on your own.

The Deadline to Drop this class with a W is Friday, November 17th

Other Policies

Disabilities: If you need any accommodation due to a disability (note taker, etc.), please don't hesitate to let me know and I'll be happy to help! All accommodations will need to be made through Disability Support Programs and Services (DSPS), which is located at RSS-141, or online at <https://www.deanza.edu/dsps/>.

Academic Integrity: I will NOT tolerate cheating or plagiarism of any kind! **This includes copying stuff off the internet!** While you're allowed (actually, encouraged) to work together) on assignments, you must turn in your own paper, and in your own words! The first offense results in a grade of "0" on the assignment and a stern warning. Any subsequent offense results in a report filed with the dean's office.

Safety: Nothing we do in this class will involve using potentially hazardous materials. However, even the safest of situations can quickly become unsafe in either the event of an emergency or when a student is acting disruptively. In the latter case, any students acting in an unsafe manor will be warned to stop, and then asked to leave if they continue. Any unsafe behavior will not be tolerated! In the event of an emergency, whether natural or man-made, we will shelter in place unless it is unsafe to do so, in which case we will evacuate AS A CLASS to the Football Field. For more information on campus safety, visit <http://www.deanza.edu/emergency/> .

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	9/25-9/29	Chapter 1: Introduction to the Course, Weather vs. Climate, The Atmosphere
2	10/2-10/6	Chapter 2: Temperature and Heat, Radiation Laws, Seasons Chapter 15: Atmospheric Optics Deadline to Add: Saturday, 10/7 Deadline to Drop with Refund/With No Grade: Sunday, 10/8
3	10/9-10/13	Chapter 3: Everything you need to know about Air Temperature Review for Exam 1, Exam 1
4	10/16-10/20	Chapter 4: Water Cycle, Humidity, and Clouds Last Day to Request Pass/No Pass: Friday, 10/20
5	10/23-10/27	Chapter 5: Stability, Cloud Formation and Precipitation
6	10/30-11/3	Chapter 6: Air Pressure, Why the Wind Blows Review for Exam 2, Exam 2
7	11/6-11/10	Course Project Assigned Chapter 7: Global Circulation, El Nino/La Nina, CA Drought Chapter 8: Air Masses, Fronts and the Norwegian Cycle, Project Topics Due No Class on Friday, Nov 10th (Veterans Day)
8	11/13-11/17	Chapter 9: How can we forecast Weather? Chapter 10: Extreme Weather, Part 1: Thunderstorms and Tornadoes
9	11/20-11/24	Chapter 11: Hurricanes and other Extreme Weather Review for Exam 3, Exam 3 (11/22), Project Outlines Due No Class on 11/23 and 11/24: Thanksgiving Holiday ☺
10	11/27-12/1	Chapter 14: Air Pollution Chapters 12 and 13: Global Climate Change
11	12/4-12/8	Course Project Presentations Review for Final
12	12/14	Final Exam in same room as our class: 12/12 at 4:45pm (24287), or 12/14 at 9:15am (24286)

NOTE: This schedule is tentative and Subject to Change for any reason (and it probably will)!