

De Anza College
Physical Science, Mathematics & Engineering Division
Meteorology 10L, Meteorology Laboratory

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| Section(s): | 45778 and 45779, Spring, 2018 |
| Instructor: | Terrence J. Mullens (Preferred Pronouns: He/Him/His) |
| Telephone: | (408) 864-8676 |
| Email: | mullensterrence@fhda.edu |
| Office Location | S48A (Right next to our classroom) |
| Office Hours(in S48A): | M/W: 2-3pm, T/Th: 1-2pm |
| Class Days/Time: | MW 12:30-1:45pm or TTh 11:30-12:45pm |
| Classroom: | S48 |
| Prerequisites: | Met 10 (Can be taken concurrently) |

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 with less legal jargon) and I actually expect you to read 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! But instead of just talking about it, we’ll get to see it in action. In this class, you’ll get to work with the many data products, graphics and instruments that real life meteorologists use to forecast and understand the weather. Laboratory assignments will use information gathered from the American Meteorological Society’s Online Weather Studies website. Information regarding how to access the website will be given on the first day of class.

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

Textbook and Course Materials:

AMS Weather Studies eManual (ISBN: 978-1-944970-07-9), which can be purchased at <https://edubooks.ametsoc.org/WXIM-17> . Because you will be doing all of your labs in groups of three, I strongly recommend picking a lab partner or two and splitting the cost of one book with them to save money. **WARNING: YOU NEED THIS BOOK BY THE SECOND DAY OF THE COURSE**

Contacting Me:

If you need to get a hold of me for any reason, please feel free to email me at mullensterrence@fhda.edu. I check my email often during business hours, less often at nights/weekends. If, for some reason you do not hear from me within 24 hours, please re-send your email. **Please contact me using the above email address rather than through Canvas.** I check my email many times a day, but only check Canvas a few times each day; you'll get a quicker response contacting me via 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).

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!

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 participation points for that day.

Attendance/Punctuality: I will take attendance at the beginning of each class. If you are late, you can check in with me at the end of the class. **However, two late arrivals will count as an absence for dropping purposes. I reserve the right to assign a pop quiz whenever I feel punctuality is becoming an issue.** While almost 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, I completely understand. However, I ask that if you must leave, that you do so quietly and respectfully.

Lab Partners: In this class, labs will be done in groups of up to 3. You will be able to select your lab partner on the first week of class, and that will be your lab partner for the rest of the quarter. Changes will only be made in extenuating circumstances and must be approved by me.

Assignments and Grading

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|---|----------------|
| Laboratory Assignments (20 @ 25 points each, lowest 2 dropped)... | 450 pts |
| Take Home Lab Quizzes (4 @ 50 points each, lowest dropped)... | 150 pts |
| Total... | 600 pts |

Grading Scale:

>540 = A, 480-539 = B, 390-479 = C, 330-389 = D, < 330 = F

+/- grades are assigned when a grade is within 14 points (2%) of the next grade.

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

Laboratory Assignments: Each class will consist of one or two laboratory investigations from the Weather Studies Investigation Manual. The labs will be submitted using an online form. While the work is submitted using an online form you are still expected to attend class and to work on the activity during class time. I will not accept work submitted from an absent student without prior arrangements. All laboratory assignments are due at the end of class on the day they are assigned, unless I announce an alternative due date.

Late Work/Makeup Policy: I will drop your lowest two labs; therefore, there will be no makeup labs. Quizzes will be take home and done on Canvas, so I will not offer any makeups on quizzes. I will however, drop your lowest quiz.

Returned Work: It is your responsibility to hold on to any returned work until the conclusion of the quarter. In the event I made an error in your grade, you may need to present the assignment to me for verification.

Dropping

I will drop you if:

- You miss more than 3 class sessions (note that 2 lates counts as a missed class)
-or-
- You miss more than three lab assignments

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, June 1st

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 submitting work under a fake name in order to get answer prior to submitting your work.** 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 | 4/9-4/13 | Introduction to the Course, De Anza Weather Station Lab 0: Introductory Lab |
| 2 | 4/16-4/20 | Lab 1B : Air Pressure and Wind Lab 1A: Surface Air Pressure Patterns |
| 3 | 4/23-4/27 | Lab 2A: Weather Maps Lab 2B: Stuve Diagrams, <i>Quiz 1 due by midnight</i> |
| 4 | 4/30-5/4 | Lab 3A: Weather Satellites Lab 3B: Seasons |
| 5 | 5/7-5/11 | Labs 4A and 4B: Air Temperature, Heating/Cooling Degree Days Lab 5A: Air Pressure Change/Frontal Passages |
| 6 | 5/14-5/18 | Lab 5B: Vertical Changes in Air Pressure Lab 6A: Temperature and Air Pressure <i>Quiz 2 due by midnight</i> |
| 7 | 5/21-5/25 | Lab 6B: Rising and Sinking Air Labs 7A and 7B: Precipitation and Radar |
| 8 | 5/28-6/1 | <i>No Class 5/28: Memorial Day</i> Lab 8A: Surface Winds |
| 9 | 6/4-6/8 | Labs 8B and 9A: The Jet Stream and Upper-Level Winds Lab 9B: El Nino, La Nina, La Nada <i>Quiz 3 due by midnight</i> |
| 10 | 6/11-6/15 | Labs 10A and 10B: Mid-Latitude Cyclones Labs 11A and 11B: Thunderstorms and Tornadoes |
| 11 | 6/18-6/22 | Labs 12A and 12B: Hurricanes and Hurricane Tracks Labs 13A and 13B: Weather Observation and Forecasting. |
| 12 | Finals Week | <i>Final Quiz Due by Midnight on 6/27</i> <i>Optional Review Sessions at 11:30am on 6/26 and 6/27 in S48</i> |

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

Student Learning Outcome(s):

*Assess and defend the analysis and decision-making skills employed by meteorologists to diagnose air patterns, understand air motions and predict future atmospheric conditions.