

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

Section(s):	12805, Summer, 2019
Instructor:	Terrence J. Mullens (Preferred Pronouns: He/Him/His)
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Office Location	S48A
Office Hours(in S48A):	By Appointment
Class Days/Time:	Online
Classroom:	Online
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 various data sources and the free lab manual. It may take a week to get the hang of things, but the class quickly becomes very doable, and in fact most people enjoy it.

Course Website and Communication

Everything you need for this course (Syllabus, Assignments, Lectures, etc.) can be found on the course page which can be accessed through Canvas. I will also make all communication (announcements/reminders, emails, etc) through the Canvas webpage. Please enable your Canvas settings to receive notification when an announcement is posted. I check my email regularly during business hours, and less often on evenings/weekends. If you have not heard back from me in 24 hours (or 48 over the weeked), please re-send your email.

Textbook and Course Materials:

Investigations in Weather and Climate by Terrence J. Mullens (Free Download – Each Chapter of the lab manual will be available on the corresponding activity’s Canvas page).

In the Classroom/Class Rules

Online Class: What's the Difference?

Because this is an online class, you are allowed to study/watch lectures/attempt assignments at your own leisure. However, online classes can be difficult, simply because they require more discipline than a traditional lecture. There are no meetings that you have to be present at... but you still need to be regularly involved in the class to succeed.

Assignments: This class is broken into **six weeks**. Each week will consist of a weekly discussion forum, two two-part laboratory investigation (each lab will have a video demonstration). Expect to spend approximately 3 hours for each two-part lab investigation, not including time spent studying/preparing for the class. There will also be a quiz every two weeks. The week's assignments will be posted no later than **12am the Monday** of the week and due by **11:59pm that Sunday**. In order to be prepared for each quiz, I strongly recommend that you complete the week's discussion and laboratory investigations PRIOR to attempting the quiz.

Participation: In addition to the Laboratory Activities and Quizzes, 50 points of your grade are determined by weekly participation in that's week's Discussion Forum. In order to get full credit for participation, you must make two posts a week (One by Thursday, and one by Sunday) of the following:

1. **Ask a content-related question onto the discussion board**
2. **Answer someone else's question on the discussion board**
3. **Post something course related that you just came across (an article, story, or weather event that you just experience), with an explanation.**
4. **Any of the 3 items above must be at least 50 words long, and have substance to them (I won't count posts such as "cool story," "that's awesome," or a regurgitation of something mentioned in the class towards your participation requirement).**

A rubric for Module Discussion Posts is available in Appendix A of this Syllabus.

A Word of Warning: While you are free to work on the modules at your leisure, I strongly urge you to **not wait until the last minute to submit a module activity**. If anything causes you to submit any module activity after the deadline, regardless of reason, you will still be assessed a late penalty. Also, you are completely responsible for making sure that your work is submitted properly. **PLEASE READ: It is assumed that you are completing your course work at home, in the United States, with a high speed internet connection and access to the Canvas page. If you choose to, or need to travel abroad during the course, you are still responsible for making sure that you are able to access and submit all course materials in a timely manner. I will not give extensions nor make exceptions to the deadlines and policies in this class for those who travel abroad.**

Getting off to a good start: Because it often takes a little time to get accustomed to online classes, nothing is due until the conclusion of the 1st week of class (Sunday, June 7th, 2019). However, I still expect you to begin working on class material as soon as the quarter begins. For census purposes, I must drop anyone who hasn't logged on or

completed any work by 11:59pm on Sunday, July 7th. I will not make exceptions to this policy!

Attendance/Punctuality: You are expected to log in to the course website **at least twice per week**, and that is the bare minimum. You will be dropped from the course if you fail to log on for the first time by Sunday, July 7th, you fail to log on at least once each week, or if you fail to turn in at least one laboratory activity in a two-week period. Regardless, if you choose to drop the course, it is your responsibility to do so. If you fail to drop before the deadline, I will have to award you a grade, most likely an F.

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.

Lab Partners: In this class, you have the choice of either working on lab assignments on your own, or in groups that you arrange with online. However, each person must submit their own lab assignments, and may not work together on quizzes (and if I catch anyone doing this, both parties will receive a "0" on the quiz... you've been warned!).

Assignments and Grading

Laboratory Assignments (24 @ 25 points each, lowest 2 dropped)...	550 pts
Participation in Weekly Discussions (6 @ 10 points each, lowest one dropped)...	50 pts
Quizzes (3 @ 50 points each, lowest dropped)...	100 pts
Total...	700pts

Grading Scale:

>630 = A, 560-629 = B, 455-559 = C, 385-454 = D, < 385 = 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 module will consist of four laboratory investigations from the Lab Manual. The labs will be submitted using an online form linked on the assignment's Canvas page. Because each laboratory assignment has a different number of questions, I scale each assignment to a point total of 25 (so that one lab doesn't carry a larger or smaller weight than another). All laboratory assignments are due at the end of the respective week, unless I announce an alternative due date.

Late Work/Makeup Policy: You can submit work up to two days after the deadline, with a 10% per day late penalty. I will drop your two lowest labs, your lowest quiz, and your lowest discussion forum.

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 two complete lab investigations
- or-
- You fail to log on at least once a week.

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 Wednesday, July 31st

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 answers prior to submitting your work (if this happens, I have to throw out the assignment and make everyone in the class do an alternative assignment).** While you're allowed (actually, encouraged) to work together on labs, you must turn in your own answer sheet, 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.

Final Grade Changes: At the end of every term, almost without fail, at least one or two students approach me to ask for additional work/some leeway with their grade to earn a higher grade. While I appreciate the gravity that grades can have, I need to both be fair to the rest of the class (I don't think other students would appreciate it if I just bumped another student's grade without merit, or gave them extra work without making it available to the rest of the class) and maintain my own academic integrity (i.e. I can get in trouble for awarding grades that were not earned), so I must deny all requests for a higher grade, except in instances where I made a mistake. However, I am more than happy to help you earn a good grade if you reach out to me for help before the end of the term. There will also be plenty of extra credit during the course.

Course Schedule

Date	Topics, Readings, Assignments, Deadlines
7/1-7/7	Lab 0: Orientation Lab (Procedures/Resources/Maps) Lab 1: Surface and Upper-Air Weather Week 1 Labs and Discussion Forum due by 11:59pm on 7/7
7/8-7/14	Lab 2: Heat, Radiation, and Seasons Lab 3: Air Temperature and Applications Quiz #1 (Opens on 7/8) Week 2 Labs, Discussion, and Quiz 1 due by 11:59pm on 7/14
7/15-7/21	Lab 4: Clouds, Moisture and Rising Air Lab 5: Weather Data, Satellite, and Radar Week 3 Labs and Discussion Forum due by 11:59pm on 7/21
7/22-7/28	Lab 6: Air Pressure Lab 7: Surface and Upper-Air Winds Quiz #2 (Opens on 7/22) Week 4 Labs, Discussion, and Quiz 2 due by 11:59pm on 7/28
7/29-8/4	Lab 8: El Nino and La Nina Lab 9: Mid-Latitude Cyclones and Fronts Week 5 Labs and Discussion Forum due by 11:59pm on 8/4
8/5-8/9	Lab 10: Thunderstorms and Tornadoes Lab 11: Hurricanes Quiz #3 (Opens on 8/5) Week 6 Labs, Discussion, and Quiz 3 due by 11:59pm on 8/9

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

Appendix A: Discussion Forum Guidelines

Weekly Forums: Each week will include a discussion forum. Here, you can post questions that you have about course material, answer other student's questions, post anything interesting (weather related) that you come across, or just engage in general discussion about the course. You are expected to participate in this forum by making 6 posts throughout the quarter (One for each week, worth 5 points each) and 6 responses throughout the quarter (One for each week, worth 5 points each). **Please note that you must make at least one post and one reply per module... You can't wait until the final forum, make 12 posts and get full credit!** Your posts will be graded using the following rubric:

Grading Rubric:

- 5pts: Post was made by 11:59pm Thursday of the week the module is due, and is at least 50 words in length. Post either asks a question related to the corresponding module or shares/describes something interesting (any sources are cited) and weather related. The post is thoughtful, well written, and is of substantial meaning to the discussion as a whole. The post doesn't just regurgitate course material, but expresses your understanding and reflection of the material.
- 3pts: Post was made after Thursday, post was made on the last day the forum was open, or post was less than 50 words in length. Post neither asks a content/course related question, nor describes any links/content shared (author just posts a link with no description or explanation). The post is overly short (just a few words) or full of "fluff" with little, if any substance. The post may just regurgitate course material without adding any reflection or understanding to the forum.
- 0pts: Post is either plagiarized, not related to weather/climate in any way, or is non-existent.

Reply/Comment Rubric:

- 5pts: Reply/Comment was made by 11:59pm Friday night of the week the module is due. Comment is based primarily on course material and facts or personal experience rather than opinion, and any criticism of the response of the original author is constructive and helpful.
- 3pt: Comment is largely opinion based and draws from little, if any, course material or personal experience –or- comment is overly critical of original author.
- 0pts: Comment either attacks original author, provides no meaningful response (like, "cool, man"), is plagiarized, or non-existent.

Note: While opinions or personal experience are welcome (and encouraged) in the forum, I will not tolerate disrespect, foul language, or personal attacks (geared towards myself or other students) of any kind. Any student who trolls, insults, publicly airs grievances (forums are not the place to complain about losing a point on an assignment), or uses the forums in an inappropriate manner will be subject to disciplinary action (either a reduction in grade, banning from the forums altogether, dropped from the class). Keep all posts tactful and related to the course.

TL;DR: Your first post is due by 11:59pm the Thursday the module is due, and your reply to another post is due by 11:59pm that Sunday. Each post must be at least 50 words long and contributes to the overall discussion. Failure to follow these guidelines will result in a reduction of points awarded (Or as students love it call it "Points Taken Off").

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.