

De Anza College
Physical Science, Mathematics & Engineering Division
Meteorology 20L, Climate Change Laboratory

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| Section(s): | 39126, Winter, 2025 |
| Instructor: | Alicia T. Mullens (Pronouns: She/Her/Hers) |
| Telephone: | (408) 864-8676 |
| Email: | mullensalicia@fhda.edu |
| Office Location | S48A on M/W Online on T/Th (at https://cccconfer.zoom.us/j/6625783048) |
| Office Hours(on Zoom): | M/W 11:30am-12:20pm, T/Th 1:00-1:50pm, and by Appointment (i.e. let me know a time that works for you, and I'm happy to make it work!)* |
| Classroom: | Online (100% Asynchronous) |
| Prerequisites: | Met 10 or 12 (Can be taken concurrently or you could have taken it years ago... I promise you won't be at a disadvantage) |

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 shorter (and with less legal jargon) and I actually expect you to read it! Your continued enrollment is your agreement to abide by the syllabus, and you will be quizzed on it during our first quiz!

Course Description

Welcome to the scary world of Climate Change! Regardless of if a friend/counselor recommended this class to you, or you signed up because of RateMyProfessors, I'm really glad you're here! In this class, you'll get to work with the many data products, graphics and instruments that real life Climate Scientists use to understand and predict changes in our climate. Laboratory assignments will use information gathered from various data sources and the free lab manual. It may take a week or two to get the hang of things, but the class quickly becomes very doable, and in fact most people enjoy it.

Student Learning Outcome

Identify the primary reasons for studying Earth's climate system and how it functions and to become more aware of the significance of climate, climate variability and climate change for our well being wherever we live.

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.

***Office Hours:** Given the weird time we're in, office hours are quite a bit different... I am regularly and diligently checking my email during the scheduled times above, but may not be logged on to my zoom office at the moment you sign on (to save bandwidth in case I'm uploading other stuff)... if that is the case, wait a few moments... anytime someone logs on, I get a notification, and will instantly jump on.

Textbook and Course Materials:

1. *Investigations in Climate Change, 1st edition* by Alicia T. Mullens (Free Download – Each Chapter of the lab manual will be available on the corresponding activity's Canvas page).
2. **Computer with access to the internet and browser that meets Canvas' system requirements** (Info: <http://www.deanza.edu/online-ed/students/>)
3. **Recommended: A webcam and access to a printer and scanner (you can get by without them, but they will make your life easier).**

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 will consist of **six modules, and three quizzes**. Each module will consist of a module discussion forums, three or four laboratory exercises (each lab will have a video demonstration). Expect each module to take approximately 6 hours, not including time spent studying/preparing for the class. We will do one module every two weeks. The module will be posted no later than **12am the Saturday** of the first week and due by **11:59pm the Friday of the second week**. In order to be prepared for the module quiz, I strongly recommend that you complete the module discussion and laboratory exercises PRIOR to attempting the quizzes.

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.

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 2nd week of class (Friday, January 17th, 2025). 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, January 19th. 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, January 19th, 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 FW.

Lab Partners: In this class, you have the choice of either working on lab assignments on your own, or in groups of 2 or 3. However, each person must submit their own lab assignments, and may not work together on quizzes. Also, Chegg does NOT count as a lab partner!

PLEASE READ: Since you are signing up for an online class, 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 Canvas and Zoom.

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. Pet Peeve: Saying something is "unfair" is not the way to solve your problem...

Working together: In this class, you have the choice of either working on lab assignments on your own, or in groups of 2 or 3. However, each person must submit their own lab assignments, and may not work together on quizzes. Furthermore, any written/problem solving/plotting work must be done in your own words... meaning three people can't turn in identical written answers... put it in your own words!

Assignments and Grading

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|---|---------------|
| Laboratory Assignments (10 @ 50 points each, lowest 2 dropped)... | 400 pts |
| Quizzes (3 @ 50 points each, lowest dropped)... | 100 pts |
| Total... | 500pts |

Grading Scale:

>90% = A, 80-89% = B, 65-79% = C, 55-64% = D, < 55% = F
+/- grades are assigned when a grade is within 2% of the next grade.
Note: I reserve the right to adjust this scale, but only to benefit you.

Laboratory Assignments: Each week will consist of two 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 50 (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 module, unless I announce an alternative due date.

Late Work/Makeup Policy: I grant an automatic one week extension on all assignments (except for stuff due the last week). You don't need to ask for it and you can use it as you see fit. But please note that I cannot offer any additional extensions beyond that extra week. I will drop your two lowest labs, your lowest quiz, and your lowest discussion forum. Please note that this policy will be enforced in all circumstances, so I strongly recommend not waiting until the last minute to complete work.

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.

Important Reminders: While these policies represent the "letter of the law," I will, in many cases, be gracious within reason. As the COVID-19 pandemic has dragged on, I've had situations where requests of leniency have become more extreme, and downright unreasonable, so I want to be clear here:

1. You are responsible for all content, assignments, and deadlines, **EVEN IF YOU HAVEN'T BEEN LOGGING IN**. Saying "oh, I haven't been here in the past two weeks" isn't a valid excuse (unless you have a legitimate, documented reason). If you need to miss a class session, I strongly recommend making a friend and having them fill you in on what you missed (at least in terms of assignments, etc).
2. My late policy is **ONE WEEK** after the deadline... any exceptions to that must be discussed with and approved by me (and only in extenuating circumstances, where it is clear that you were not able to meet the deadline for a valid reason). Emailing me in week 9 asking if you can make up an assignment from week 3 is **NOT** okay, and such requests will be denied... I'm not trying to be mean... just fair!
 - a. Seriously... I've had people email me in the last week or two of the course asking if I'll accept work from the first few weeks... the answer is no. I bake a lot of forgiveness (dropped assignments, extra credit) into my grading, so, to quote the Beatles, if you missed something from earlier in the course, "Let it be!"
 - b. Even worse, some have started making it a habit to wait until after I've finalized grades to ask me to accept work (after the term has ended). I simply can't do that... it's not fair to the rest of the class, nor me.
3. Once I announce a deadline in class (or on Canvas), you are expected to write it down and keep track of it... any additional reminders are a courtesy, and should not be relied on. I'll always try to give a reminder, but I'm also human.

All of this being said, I seriously try to be gracious... I just want to make sure that I'm establishing a proper boundary, as a well trained therapist would say. If you need to miss a bunch of class, or encounter an issue, please reach out to me, and I'll work with you... but don't wait until after things have settled down to do so... the moment you need help, let me know!

Dropping

I will drop you if:

- You miss more than one complete module
- or-
- You fail to log on at least once a week for two consecutive weeks.

Otherwise, if you choose to drop the class, you must do so on your own. Failure to do so will result in you being awarded an FW, which is the equivalent of an F.

The Deadline to Drop this class with a W is Friday, February 28th

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.** While you're allowed (actually, encouraged) to work together on labs, you must turn in your own answer sheet, **and in your own words! Multiple students submitting identical written answers is considered a violation of this policy!** 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 student affairs.

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.

Met 10 or 12 Lecture Class: A common misunderstanding that many have is that this class is a part of my Met 10 Lecture Class (i.e. same grade, same deadlines, etc)... that's not true. This class is completely independent from my sections of the "regular" Met 10 class. Also, some express concern about taking a different lab instructor than they had for their lecture class. I can reassure you that you are at no disadvantage if you took the Met Lecture classes with a different instructor, or in a different term (or even at a different school!).

TL;DR: Engage in the class, try your best, turn in your work on time, don't cheat/copy off of others/submit identical written work, and reach out whenever you need help and I promise you that I won't let you fail this class! Everything else is just details (still read them because I will adhere to them, but the gist is above)!

Important dates/deadlines:

Deadline to Add: 1/18

Deadline to Drop with Refund: 1/19

Deadline to Drop with a W: 2/28

Course Schedule

| Date | Topics, Readings, Assignments, Deadlines |
|-----------------------|---|
| Module 1 1/6-1/17 | Lab 0: Orientation Lab Lab 1: Defining Earth's Climate Module 1 Labs due by 11:59pm on 1/17 |
| Module 2 1/18-1/31 | Lab 2: Climate Change – Past and Present Lab 3: Climate Visualization tools Quiz #1 Module 2 Labs and Quiz 1 due by 11:59pm on 1/31 |
| Module 3 2/1-2/14 | Lab 4: Radiation and Seasons Lab 5: Greenhouse Gasses and the Carbon Cycle Module 3 Labs due by 11:59pm on 2/14 |
| Module 4 2/15-2/28 | Lab 6: Atmospheric Circulation and Averages Lab 7: Natural Climate Changes Quiz #2 Module 4 Labs and Quiz 2 due by 11:59pm on 2/28 |
| Module 5 3/1-3/14 | Lab 8: Feedback Loops and Impacts of Climate Change Lab 9: Climate Models and Predictions Module 5 Labs due by 11:59pm on 3/14 |
| Module 6 3/15-3/28 | Lab 10: Solutions, Perspectives and Policies Quiz #3 Module 6 Labs, and Quiz 3 due by 11:59pm on 3/28 |

NOTE: This schedule is tentative and Subject to Change for any reason

Student Learning Outcome(s):

- Identify the primary reasons for studying Earth's climate system and how it functions and to become more aware of the significance of climate, climate variability and climate change for our well being wherever we live.

Office Hours:

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| M,W | 11:30 AM | 12:20 PM | Zoom,Canvas,Email,In-Person | S48A |
| T,TH | 01:00 PM | 01:50 PM | Zoom,Canvas,Email | |