

De Anza College
Physical Science, Mathematics & Engineering Division
Meteorology 12, Introduction to Climate Change

Section(s):	25865, Fall 2025
Instructor:	Neel Desai
Email:	desaineel@fhda.edu
Office Hours	Wed 1 – 2 pm on Zoom https://fhda-edu.zoom.us/j/2921026568
Classroom:	Online (100% Asynchronous)
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 shorter (and with less legal jargon), and you are required 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 MET 12: Introduction to Climate Change. Regardless of whether a friend/counselor recommended this class to you, I’m happy you’re here! This course will cover all the fundamental concepts behind the topic of Climate Change. This includes Global Warming, The Greenhouse Effect, Natural and Human-Caused Climate Change, Paleoclimatology, Climate Modeling, and Mitigation Strategies. We’ll also cover areas of interest such as how current events relate to Climate Change, and the local impacts of Climate Change.

Student Learning Outcomes

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

1. Distinguish Science from Pseudoscience
2. Assess the tools and procedures used by climate scientists to reconstruct earth’s previous climate and to predict future climate shifts
3. Explain the terms and concepts of climate science and use those terms and concepts to communicate local and global issues of climate concern.

Course Website and Communication

Everything you will do in this class will be posted/submitted on the course’s Canvas webpage. You are expected to log on to the course webpage at least two times a week. I will also make all communication (announcements/reminders/emails) through Canvas. Also note that it is your responsibility to stay on top of assignments and deadlines.

Office Hours

I will be present on Zoom at the times mentioned above. If those times don’t work for you, please message me on Canvas or email me, and we can arrange a Zoom call at a more convenient time. If you would like to meet me in person, I’ll be on the De Anza campus on Mondays and Wednesdays.

Contacting Me

If you need to get in touch with me for any reason, please email me at desaineel@fhda.edu or use Canvas Messenger. I check my email continuously during the office hours scheduled above, often during business hours, and less often at night/weekends.

Response Times

I will do my best to respond to Canvas messages, discussion questions, and emails within 24 hours. But sometimes (like on weekends) it might be around 48 hours.

Textbook and Course Materials:

1. **Textbook:** “Climate Change: Causes, Consequences, and Solutions” by Arnold J. Bloom (2018). The textbook is a **free** online resource, which can be accessed at: <https://indd.adobe.com/view/8f2ed4a1-a1b0-4f12-b5bb-5009bbbada0f3>
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).

Classroom Policies

Online Asynchronous 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 courses can be challenging 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 **10 modules** and a **Final Exam**. Each module will consist of a discussion forum, a series of video lectures, reading assignments, an activity, and a quiz. Expect each module to take approximately 5 hours, not including time spent studying/preparing for the class. We will do one module each week. The module for each week will be posted no later than **Sunday night** of the week, and Assignments will be due by **11:59 pm on the Friday** of the week.

In addition to Module Activities, Module Quizzes, and Exams, 100 points of your grade are determined by weekly participation in that week’s Module Discussion forum.

1. Ask a content-related question on the discussion board.
2. Attempt to answer someone else’s question on the discussion board. Your answer doesn’t have to be correct; I’ll chime in if no one knows the answer. Otherwise, I’d like a good reply.
3. Post something course-related that you just came across (an article, story, or weather event that you just experienced), with an explanation.
4. Any of the 3 items above must be at least 10 words in length and have substance to them (I won’t count posts such as “cool story!” or “that’s awesome!” towards your participation requirement).

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

A word of warning

While you are free to work on the modules at your leisure, I strongly urge you not to **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 entirely responsible for making sure that your work is submitted correctly and on time.

Late/Make-up policy

Stuff happens, people get sick, accidents happen, and natural disasters can strike. If any of this causes you to miss an assignment/quiz/midterm/final, let me know as soon as possible, and I'll work with you to obtain a reasonable extension/rescheduling. If you do not contact me before the deadline, you can still submit the assignment, but Canvas will deduct 10% points/day.

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. However, I still expect you to begin working on class material as soon as the quarter starts. For census purposes, I must drop anyone who hasn't logged on or completed any work by Sunday, October 5th.

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, October 5th, if you fail to log on at least once each week, or if you fail to turn in at least one discussion/activity in two weeks. Regardless, if you choose to drop the course, it is your responsibility to do so. If you fail to drop the class before the deadline, I will have to award you a grade, most likely an FW.

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 brought to me both in private and respectfully (while I'm happy to discuss any complaints or grievances, I refuse to be addressed in a disrespectful and unprofessional manner). I've found that 99.9% of any issues that arise are easily settled (and to everyone's satisfaction) by a brief (and respectful) conversation.

Assignments and Grading

Breakdown

Module Discussion (10 @ 10 points each)	100 pts
Module Activities (10 @ 10 points each)	100 pts
Module Quizzes (10 @ 10 points each)	100 pts
Final Exam...	100 pts
Total...	400 pts

Grading Criteria and Discussion Forum Policies

The grading criteria for your work and the policies for the discussion forums are available in Appendix A and Appendix B of this syllabus.

Grading Scale:

Letter Grade	Range
A	100% to 94%
A-	< 94% to 90%
B+	< 90% to 87%
B	< 87% to 84%
B-	< 84% to 80%
C+	< 80% to 75%
C	< 75% to 65%
D+	< 65% to 60%
D	< 60% to 55%
F	< 55% to 0%

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, or submitting work under a phony name to get "answers" before making an actual submission! While you're allowed (actually, encouraged) to work together) on assignments, you must turn in your own work, and in your own words! The first offense results in a grade of "0" on the assignment and a stern warning. Any subsequent offense will result in a report being filed with the college.

Incomplete Contracts

Except for very special circumstances (where what you missed is small and can easily be made up), I'm no longer honoring requests for incompletes. This is because students I have arranged incomplete contracts in the past have never been able to complete the missed work. If you are in a situation where something catastrophic happens in the last few weeks of the class, consider applying for an Excused Withdrawal (EW) grade. If the required work to complete the class is something small, such as making up the final exam (something that I can easily arrange), I can consider placing an incomplete.

Dropping the class

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.

Last day to drop this class without a W: **October 5**

Last day to drop this class with a W: Nov 14

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 opportunities available throughout the course.

Summary

Remember, this class is for you to learn something about our climate. Engage actively in class, do your best, submit your work on time, refrain from cheating, copying from others/submitting identical written work, and reach out whenever you need help.

Important dates/deadlines:

Classes begin 9/22

Deadline to Drop with a W: 11/14

Course Schedule

Week	Topics, Readings, Assignments, Deadlines
1	Module 0: Course Introductions, Due 9/27
2	Module 1: Context of Climate Change, Due 10/3
3	Module 2: History of Earth's Climate, Due 10/10
4	Module 3: Heat and Energy, Due 10/17
5	Module 4: The Greenhouse Effect and Seasons, Due 10/24
6	Module 5: The Carbon Cycle, Due 10/31
7	Module 6: Natural Climate Changes, Due 11/7
8	Module 7: Climate Feedback, and Future Predictions, Due 11/14
9	Module 8: Energy, and Carbon Footprint, Due 11/21
10	Module 9: Transportation Alternatives, Due 11/28
11	Module 10: Climate Perceptions and Policies, Due 12/5
12	Final Exam Opens on 12/8 and is due on 12/12

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

Appendix A

Grading Rubric: While each assignment/exam/activity is different, I always use the following guidelines when I award points (I don't "take points off," I award points):

The maximum number of points are awarded for work that is:

1. Clearly written and answers the question.
2. Detailed and thorough, leaving no doubt that you understand the material.
3. Submitted following directions and is on time.
4. Accurate (aka your answer is correct)

A reduction in the number of points awarded (aka "points taken off") happens when:

1. You don't put your name on the assignment (5 points for an exam, 1 point for all other assignments).
2. You don't show your work... ***Always show your work and provide evidence.***
3. You don't follow directions, or you don't answer the question.
4. You don't explain your answer: Whenever I say "list and explain/describe," an explanation or description is required in order to earn maximum credit.
5. You include irrelevant/incorrect information. There is such a thing as saying too much (I call this "throwing everything onto your paper and expecting credit for what sticks").
6. Using an unverified or inappropriate source (i.e. Wikipedia, Quora, etc).
7. The work is copied from a source and not put in your own words. A quote or "blurb" is okay, but when the majority of your answer isn't actually your work, it's not fair to award you points for someone else's work. When the work is copied from another student or a source without proper credit given, this also becomes an academic dishonesty issue (see my policy on academic dishonesty).
8. The submitted work is poorly written or unclear. Always proofread your work!
9. The work is submitted late or missed due to unexcused absences.

I will share any other details regarding a specific assignment prior to attempting/submitting that assignment. Please note that whenever I grade an assignment, I approach it from an "I know nothing" standpoint, meaning that your job on every assignment in this course is to teach me the material (you know 90% of what you can teach). A lower number of points are awarded when there are holes in your explanation, major details are left out, or the information is inaccurate.

Appendix B: Discussion Forum Guidelines

Module Forums: Each module 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 10 posts throughout the quarter or 10 responses throughout the quarter (One for each module). **Please note that you must make at least one post or one reply per module... You can't wait until the final module forum, make 10 posts and get full credit!**

Your posts will be graded using the following rubric:

Grading Rubric:

- 10pts: Post was made by 11:59pm Friday of the week the module is due, and is at least 10 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.
- 5pts: 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:

- 10pts: 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.
- 5pt: 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, non-existent or unrelated to weather/climate.

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.

Student Learning Outcome(s):

- Distinguish Science from Pseudoscience.
- Assess the tools and procedures used by climate scientists to reconstruct earth's previous climate and to predict future climate shifts.
- Explain the terms and concepts of climate science and use those terms and concepts to communicate local and global issues of climate concern.

Office Hours:

M	1:00 PM - 2:00 PM	PSME Village
T	1:00 PM - 2:30 PM	Zoom
T	1:00 PM - 2:30 PM	Zoom
W	1:00 PM - 2:00 PM	PSME Village