

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

Section(s):	25865, Fall 2024
Instructor:	Neel Desai
Email:	desaineel@fhda.edu
Office Hours	Mon 10:15-11:30 am in S42 or by Appointment on Zoom
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 much shorter, and I actually expect you to read it! Our first quiz will be heavily based off it! Your continued enrollment is your agreement to abide by the terms and conditions outlined in this syllabus.

Course Description

Welcome to Climate Change at De Anza! Regardless of if a friend/counselor recommended this class to you, I’m really glad you’re here! This course will cover all of 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 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 available in person in room S42 on campus during the office hours, so if you want to drop by and ask me any questions, please feel free to do so. If you prefer to talk to me via zoom, please message me on canvas or email me and we can set up a zoom call. Remember, I'm here to help you succeed!

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-5009bbbad0f3>
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).**

Contacting Me

If you need to get a hold of me for any reason, please email me at desaineel@fhda.edu or through the Canvas Messenger. I check my email continuously during the office hours scheduled above, often during business hours, and less often at nights/weekends.

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 **10 modules**, and **the 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 **Monday morning** of the week and due by **11:59pm 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's week's Module Discussion forum.

1. **Ask a content-related question onto 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 else I'll 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 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: Since you signed 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.**

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 begins. For census purposes, I must drop anyone who hasn't logged on or completed any work by 11:59pm on Sunday, October 6th. I cannot not make exceptions to this policy (I've had students do absolutely nothing in the first two weeks of the course, get dropped, and then come to me begging to be let back in... unfortunately I'm not allowed to do that, so please make sure you do something prior to October 6)!

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 6th, you fail to log on at least once each week, or if you fail to turn in at least one module 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.

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

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 Scale:

>90%=A, 88-89.9%=A-, 80-87.9%=B, 78-79.9%=B-, 65-77.9%=C, 55-64.9%=D, < 55%=F

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

Grading Criteria and Discussion Forum Policies: A general criterion for how I will grade your work and the policies for the discussion forums are available as Appendix A and Appendix B of this syllabus.

Extra Credit: I will sprinkle some extra credit throughout the course, and will also drop your lowest module activity, module quiz, and module discussion. I know a less than perfect score can trigger anxiety, so I want to assure you that I bake plenty of forgiveness into the grade... getting that coveted A won't be too difficult, as long as you remain engaged in the class.

Incomplete Contracts: With the exception of 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 arranging an incomplete.

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.

The Deadline to Drop this class with a W is Friday, Nov 15th

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” prior to 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 results in a report filed with the college.

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.

TL;DR: Remember, this class is for you to learn something about our climate. Engage, ask questions, 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. If you do that, I promise you that I won’t let you fail this class!

Important dates/deadlines:

Classes begin 9/23

Deadline to Drop with a W: 11/15

Course Schedule

Week	Topics, Readings, Assignments, Deadlines
1	Module 0: Course Introductions, Due 10/4
2	Module 1: Context of Climate Change, Due 10/4
3	Module 2: History of Earth's Climate, Due 10/11
4	Module 3: Heat and Energy, Due 10/18
5	Module 4: The Greenhouse Effect and Seasons, Due 10/25
6	Module 5: The Carbon Cycle, Due 11/1
7	Module 6: Natural Climate Changes, Due 11/8
8	Module 7: Climate Feedback, and Future Predictions, Due 11/15
9	Module 8: Energy, and Carbon Footprint, Due 11/22
10	Module 9: Transportation Alternatives, Due 11/29
11	Module 10: Climate Perceptions and Policies, Due 12/6
12	Makeup Module: Climate Change in the Bay Area, Due 12/13
13	<i>Final Exam Opens on 12/9 and due 12/13</i>

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, 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.

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	10:15 AM	11:30 AM	In-Person	S42
W	10:15 AM	11:30 AM	In-Person	S42