

**De Anza College**  
**Physical Science, Mathematics & Engineering Division**  
**Meteorology 10, Weather & Climate Processes**

<b>Section(s):</b>	24286 Fall 2024
<b>Instructor:</b>	Neel Desai
<b>Email:</b>	<a href="mailto:desaineel@fhda.edu">desaineel@fhda.edu</a>
<b>Office Hours:</b>	Mon 10:15-11:30 am in S42 or by Appointment on Zoom
<b>Class Days/Time:</b>	Mon/Wed 11:30-12:20 am AND 3 hours online (independent)
<b>Classroom:</b>	S42 (Yes, on campus!)
<b>Prerequisites:</b>	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 the wonderful world of Weather! Regardless of if a friend/counselor recommended this class to you, I’m glad you’re here! This course will cover all the fundamental concepts behind the weather we see in our everyday lives. This includes atmospheric structure/composition, heat and radiation, forces that affect wind, humidity, atmospheric stability, precipitation and clouds, extreme weather and climate change. We’ll also cover areas of interest such as the California Drought, El Nino/La Nina, Fire Weather, and potentially any major weather events that occur during the quarter.

### **Student Learning Outcomes**

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

1. Analyze and explain the objective techniques used by synoptic meteorologists and climatologists to forecast our planet's weather and to predict future changes in our planet's climate.
2. Assess and critique the impact of meteorology and climatology as sciences on local, national and international economic, environmental, ethical and political issues including climate change.

## **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.

Also note that it is your responsibility to stay on top of assignments and deadlines... while I try my best to send out reminders often, a lack of a reminder isn't a valid excuse for missing work (just like in the working world). Once I announce any assignment/deadline in class, any additional reminders (with the exception of necessary changes) are a courtesy.

## **Textbook and Course Materials:**

- 1. Recommended Textbook:** "Essentials of Meteorology" by C. Donald Ahrens 8<sup>th</sup> edition (older editions are fine too!)
- 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](mailto: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.

## **In the Classroom/Class Rules How this class is going to work:**

**This is a HYBRID class, meaning that a part of the class takes place in a traditional face-to-face setting while the other part takes place online. PLEASE NOTE... this is NOT just a two hour a week class... if you think that and act accordingly, you will not succeed! This is also not just an online class either... you are REQUIRED to attend on-campus sessions.**

## **Here's the breakdown:**

- Face-to-face sessions (11:30-12:20 Monday and Wednesday) will be devoted entirely to lectures in class covering course content. Please, use the lectures to interact with me, ask questions and clarify doubts.
- Online sessions (3 hours of the week), you should use to complete canvas activities, quizzes and reading material for the next class! Almost every week, you will have some kind of assignment that you'll have to turn in by Friday night.
- Each week will include a quiz that covers the lectures and review sheets. These quizzes are required and will make up 200 points of your course grade. However, you will be allowed to make 2 attempts on each quiz

- We will also have a midterm on Weeks 4 and 8, covering the course material from the previous several weeks. These midterms will happen on campus and closed book and technology. Both midterms will be worth 50 points each, making 100 points.

**The “conduct” stuff:** We are all adults (those taking this class through middle college or any high school partnership program, I still see you as an adult), so I will treat you as adults and I expect you to do the same. This means being respectful to one another and to myself. If I find you acting disrespectful towards anyone or me, I will ask you to leave. Also note that racism, sexism, homophobia, transphobia, classism, intolerance of another’s socioeconomic, religious, political, or philosophical status won’t be tolerated.

**Cell phones:** I get it... we’re all addicted to these damn things, myself included. Please be respectful towards me and your fellow students by putting away your phone and putting it on silent. If you do decide to be on your phone during class time, be forewarned that I reserve the right to call you out for doing so. Seriously, it’s only 50 minutes... put your phone away and engage in the class!

**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. With that said, be respectful and professional when approaching me about any issues that arise; grievances aired in a rude and disrespectful manner won’t be considered and won’t help your case.

**My Expectations (how to get an “A” in this class):**

1. Attend every (or almost every) class session, and be on time, or reach out to me if you have to miss. While in class, be fully present (i.e. not on your phone/tablet). **Also, know that if you need to miss class, you are still responsible for any material that you missed that day!**
2. Use the quizzes as an extra study tool for the midterms.
3. Reach out when you need help or something is wrong; I’m happy to help!
4. Accept constructive criticism/feedback. When I took Met 10, I didn’t get a perfect score on everything... but I learned/grew from it.
5. Become less focused on the points and more focused on the POINT! Students who take an interest in the class almost always get A’s. **NOTE: I get a ton of emails from students near the end of the quarter saying things like “my grade is important to me,” but those same students never once reach out for actual help with understanding the course material. Please note that if your grade is important to you, I EXPECT YOU TO see understanding of the material as important too (and will keep that in mind when considering any requests for things like extensions/grade leniency and stuff like that).**

## Assignments and Grading

Weekly Quizzes	200 pts
Activities	100 pts
Midterms (In-Class)	100 pts
Final Exam...	100 pts
<b>Total...</b>	<b>approx. 500 pts</b>

### Grading Scale:

> 90% = A, 80% = B, 65% = C, 55% = D, < 55% = F

+/- grades will be assigned when a grade is within 2% of the next grade level

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

**Midterms:** There will be two midterms given on-campus, covering material from the lecture videos/review sheets. These will consist of some multiple choice questions, some longer answers taken from the quizzes, and others taken from the class content. You will be allowed to bring your review sheets/notes (2x2 inches sheet) with you to take the midterms. The Final Exam will be a comprehensive exam based on a study guide I'll provide two weeks prior to the date of the final.

**Important Reminders:** While these policies represent the "letter of the law," I will, in many cases, be gracious within reason. As we have adjusted to a post-pandemic education environment, 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 MISS CLASS**. 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. 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.

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 am required to drop you if:

- You miss more than 2 weeks of class, OR
- You fail submit more than 2 Assignment.
- ***The Deadline to Drop this class with a W is Friday, Nov 15<sup>th</sup>***

## 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!** 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 Student Conduct.

**Incomplete Contracts:** Apart from 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.

**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:** 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 assure you, you won't fail this class.

### Important dates/deadlines:

*Classes begin 9/23*

*11/11 Veterans Day holiday – no classes; offices closed*

*Deadline to Drop with a W: 11/15*

*11/28-12/1 Thanksgiving holiday – no classes; offices closed*

## Course Schedule

Week	Topics, Readings, Assignments, Deadlines
1	Introduction to the Course, Weather vs. Climate, The Atmosphere.
2	Temperature and Heat, Radiation Laws, Seasons, Air Temperature
3	Latent Heat and Relative Humidity
4	Midterm #1 (Covers material from Weeks 1-3 videos)
5	Stability, Clouds and Precipitation
6	Air Pressure, Why the Wind Blows
7	Global Circulation
8	Midterm #2 (Covers material from Weeks 4-7 videos) Fronts and Mid-Latitude Cyclones
9	Extreme Weather Part 1: Thunderstorms and Tornadoes
10	Extreme Weather Part 2: Hurricanes and Other Extreme Weather
11	Global Climate Change
12	<i>In-Class Final Exam</i>

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

## Appendix A: Grading Rubric

**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 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"). Remember that you are trying to show me what you understand.
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 most 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.

**Commonly Asked Question: "Do you grade on completion, or accuracy?"**

**My Answer: It depends... but only on the type of assignment:**

**1. Activities: 50% on Completion, 50% on Accuracy**

Quizzes, Midterms and Final Exam: 0% on Completion, 100% on Accuracy

**Student Learning Outcome(s):**

- Analyze and explain the objective techniques used by synoptic meteorologists and climatologists to forecast our planet's weather and to predict future changes in our planet's climate.
- Assess and critique the impact of meteorology and climatology as sciences on local, national and international economic, environmental, ethical and political issues including climate change.

**Office Hours:**

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