

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

<b>Section(s):</b>	10956 (61Z), Summer 2020
<b>Instructor:</b>	Terrence J. Mullens
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<b>Office Hours:</b>	By Appointment (I'm happy to do online and zoom meetings)
<b>Classroom:</b>	Online
<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 of 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! This course will cover all of 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, and potentially any major weather events that occur during the quarter.

### **Course Website**

Everything you will do on 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.

### **Textbook and Course Materials:**

1. RECOMMENDED (but not required): “Essentials of Meteorology” by C. Donald Ahrens 7<sup>th</sup> edition (older editions are fine!). I also have several copies of recent (5<sup>th</sup> 6<sup>th</sup> and 7<sup>th</sup> editions) on reserve in the library.
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 [mullensterrence@fhda.edu](mailto:mullensterrence@fhda.edu) or through the Canvas Direct Messenger (I have no

preference... either one works). I check my email often during business hours, and less often at nights/weekends. If, you do not hear from me within 24 hours (48 hours for the weekend), **please re-send your email (I cannot stress this enough!)**.

### **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, 6 weekly discussion forums, and two exams** (the midterm and final). Each module will consist of a series of video lectures, an activity, a practice quiz and a quiz. Expect each module to take approximately 5 hours, not including time spent studying/preparing for the class. Because this is a summer class, we will do two modules each week (with the exception of the midterm week). The first module of each week will be posted no later than **12am the Monday** of the week and due by **11:59pm that Thursday**. For Module 1, the deadline is Sunday, July 5<sup>th</sup>. The second module of the week will be posted no later than **12am the Thursday** of the week and due no later than **11:59pm that Sunday**. You are allowed to submit modules up to 48 hours late, but you will be penalized by **10% for each day late**. I cannot make any exceptions to this policy, regardless of any reason.

In addition to Module Activities, Module Quizzes and Exams, 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 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 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 assignment. If anything causes you to submit any module assignment after the deadline, regardless of reason, you will still be assessed a late penalty. The same goes for the late deadline; if you are unable to submit your module activities within 48 hours of the original deadline, it will not be accepted, regardless of reason, and you will be directed to submit the makeup module. 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 1<sup>st</sup> week of class (Sunday, July 5<sup>th</sup>, 2020). 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 5<sup>th</sup>. 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 5<sup>th</sup>, you fail to log on at least once each week, or if you fail to turn in at least one module activity in a given week. Regardless, if you choose drop the course, it is your responsibility to do so. If you fail to drop before the deadline, I 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.

### **Important Dates:**

Holiday (Campus Closed): **July 3<sup>rd</sup>** Last Day to Drop (and get a refund): **July 1<sup>st</sup>**  
Last Day to Add: **July 2<sup>nd</sup>** Last Day to Drop (With a "W"): **August 7<sup>th</sup>**

### **Assignments and Grading**

Weekly Discussion (6 @ 10 points each, lowest dropped)...	50 pts
Module Activities (11 @ 20 points each, lowest dropped)...	200 pts
Module Quizzes (11 @ 20 points each, lowest dropped)...	200 pts
Midterm Exam...	100 pts
Final Exam...	150 pts
<b>Total...</b>	<b>700 pts</b>

### **Grading Scale:**

>630 = A, 560-629 = B, 455-559 = C, 385-454 = D, < 385 = F

+/- grades will be assigned when a grade is within 14 points (2%) of the next grade level

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

**Grading Criteria and Discussion Forum Policies:** A general criteria 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.

**Late/Makeup Policy:** You are allowed to submit modules up to 48 hours late, but you will be penalized by **10% for each day late**. I will not make any exceptions to this policy, regardless of any reason. I will drop your lowest module. **I will not schedule makeups/accept late exams for any reason!**

### **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, and submitting a paper that is identical to a classmates.** 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 dean's office.

**A word about final grades:** Once the quarter has ended and grades have been submitted, I am only allowed to make changes in the event that a mistake was made in calculating your grade. In order to be fair to the entire class, while I'm happy to fix any mistakes, I am unable to make special considerations from someone for a higher grade.

### Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	6/29-7/5	Module 1: Introduction to the Atmosphere, <b>Due 7/5</b> Module 2: Temperature and Heat, <b>Due 7/5</b>
2	7/6-7/12	Module 3: Moisture and Clouds, <b>Due 7/9</b> Module 4: Stability and Precipitation, <b>Due 7/12</b>
3	7/13-7/19	Module 5: Wind and Atmospheric Circulations, <b>Due 7/15</b> <b>Midterm Exam: Friday, 7/17 (Open at 12am Closes* at 11:59pm)</b>
4	7/20-7/26	Module 6: Circulations, Monsoon, El Nino, <b>Due 7/23</b> Module 7: Fronts and Mid-Latitude Cyclones, <b>Due 7/26</b>
5	7/27-8/2	<b>Deadline to Drop with a W: 7/31</b> Module 8: Thunderstorms and Tornadoes, <b>Due, 7/30</b> Module 9: Hurricanes and Superstorms, <b>Due 8/2</b>
6	8/3-8/7	Module 10: Global Climate Change, <b>Due 8/5</b> Makeup Module: Weather Forecasting, <b>Due 8/7</b> <b>Final Exam: Friday, 8/7 (Open at 12am, Closes* at 11:59pm).</b>

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

**\*Also, I receive at least a handful of people who request me to "re-open" the exams after the posted deadlines each quarter. Unless there is a life-or-death and verifiable emergency, I'm unable to do so, because that would be unfair to the rest of the class (and could actually get me in a lot of trouble).**

## 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 as 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

**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 module, worth 5 points each) and 6 responses throughout the quarter (One for each module, 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 module 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 Sunday 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 student love to call it "Points Taken Off").

**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.