

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

<b>Section(s):</b>	12414 (66Z), Summer 2018
<b>Instructor:</b>	Terrence J. Mullens
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<b>Office Hours:</b>	Online (by email): 4:00-4:50pm Mon, Wed In Person (Office S48A): By Appointment
<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.

### **RECOMMENDED (but not required) Textbook and Course Materials:**

“Essentials of Meteorology” by C. Donald Ahrens 7<sup>th</sup> edition (older editions are fine!). I also have copies of the 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> editions on reserve in the library.

### **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). Please note that while Canvas has a nifty messenger, I’m not on Canvas nearly as often as my FHDA email (I log on to Canvas several times a day... I’m logged into my email almost continuously)... **you will get a much faster response by emailing me instead of using Canvas!** I check my email continuously during the

office hours scheduled above, often during business hours, and less often at nights/weekends. If, you do not hear from me within 24 hours, please re-send your email.

### **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 **two exams** (the midterm and final). Each module will consist of a discussion forum (to be posted on Canvas), 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 8<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.

**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.

**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 8<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 4<sup>th</sup>**    Last Day to Drop (and get a refund): **July 4<sup>th</sup>**  
Last Day to Add: **July 8<sup>th</sup>**                      Last Day to Drop (With a "W"): **July 31<sup>st</sup>**

## Assignments and Grading

Module Discussion (10 @ 10 points each)...	100 pts
Module Activities (10 @ 20 points each)...	200 pts
Module Quizzes (10 @ 20 points each)...	200 pts
Midterm Exam...	100 pts
Final Exam...	100 pts
<b>Total...</b>	<b>700 pts</b>

### Grading Scale:

>630 = A, 560-629 = B, 476-559 = C, 420-475 = D, < 420 = 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.

**Module Discussions:** For each module, you are expected to participate in the Module discussion forum. To participate, you must do the following two things: 1. Make a post either asking a content related question, answering someone else's question, or sharing something interesting (but related to Weather/Climate) with the class, and 2. Reply to someone else's post. Guidelines and a criteria for these posts is available at the end of this syllabus.

**Module Activities:** In each module, there will be an exercise/activity designed to build on the module's topic. Many of these modules will involve applications of course material, exploring some of the meteorological resources available to the public, or watching a documentary related to a particular instance of the module's topic. Please note that some activities will require submitting a file to me for grading. Because Canvas is only able to open certain files, the file you upload must either be a .doc/docx (Word), .pdf (Adobe), or a .jpg (Image) format.

**Module Quizzes:** These are low risk, high reward ways of checking your knowledge, and making sure you have developed a key understanding of the module's material. There are no time limits on a module quiz, and you can take it as many times as you'd like. Each quiz will consist of 10 multiple choice questions.

**Midterm and Final Exam:** The Midterm and Final are both timed (90 minutes to complete) exams consisting of 50 multiple choice questions. The midterm will take place on Friday, July 20<sup>th</sup>, and the final will take place on Friday, August 10<sup>th</sup>. Each exam will open at 12am and close at 11:59pm the following evening. For each exam, I will give a study guide and sample exam a week in advance for you to prepare/work on. Please note that while the exams are open book/notes/anything, because they are timed, I expect you to have mastered the material prior to taking the exam. It would also be a good idea to have all of your notes, old quizzes, and practice exam by your side before you begin taking the exam.

## 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 classmate.** 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	7/2-7/8	Module 1: Introduction to the Atmosphere, <b>Due 7/8</b> Module 2: Temperature and Heat, <b>Due 7/8</b>
2	7/9-7/15	Module 3: Moisture and Clouds, <b>Due 7/12</b> Module 4: Stability and Precipitation, <b>Due 7/15</b>
3	7/16-7/22	Module 5: Wind and Atmospheric Circulations, <b>Due 7/19</b> <b>Midterm Exam: Friday, 7/20 (Open at 12am, Closes at 11:59pm)</b>
4	7/23-7/29	Module 6: Circulations, Monsoon, El Nino, <b>Due 7/26</b> Module 7: Fronts and Mid-Latitude Cyclones, <b>Due 7/29</b>
5	7/30-8/5	<b>Deadline to Drop with a W: 7/31</b> Module 8: Thunderstorms and Tornadoes, <b>Due, 8/2</b> Module 9: Hurricanes and Superstorms, <b>Due 8/5</b>
6	8/6-8/10	Module 10: Global Climate Change, <b>Due 8/9</b> Makeup Module: Weather Forecasting, <b>Due 8/11</b> <b>Final Exam: Friday, 8/11 (Open at 12am, Closes at 11:59pm).</b>

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

## Appendix: Discussion Forum Guidelines

**Module Forums: Each module will include a 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 (One for each module, worth 5 points each) and 10 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 10 posts and get full credit!** Your posts will be graded using the following rubric:

### Grading Rubric:

- 5pts: 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.
- 3pts: 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.
- 0pts: Post is either plagiarized, not related to weather/climate in any way, or is non-existent.

### Reply/Comment Rubric:

- 5pts: 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 either 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):**

\*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.