



*Physical Science, Math & Engineering Division  
Earth & Space Science Program – Meteorology Department*

**Logistical Information:**

<b>Course</b>	Meteorology 10 – Weather & Climate Processes
<b>Section</b>	65Z (CRN 11744)
<b>Term</b>	Summer 2020
<b>Instructor</b>	Bridget James
<b>Class Location</b>	ONLINE - <a href="http://canvas.deanza.edu">http://canvas.deanza.edu</a>
<b>Office Hours</b>	Wednesdays 2 – 5 pm (Immediate email replies)
<b>Office Location</b>	Online/Email
<b>Email</b>	<a href="mailto:jamesbridget@fhda.edu">jamesbridget@fhda.edu</a>

**Required Materials:**

- Ahrens, D., 2018, Essentials of Meteorology, An Invitation to the Atmosphere, 8<sup>th</sup> Edition, Cengage Learning (Older edition is okay – Note that an older edition may differ from chapter/page numbers referenced in class)
- Regular and reliable access to a computer with a good Internet connection

**Course Description:**

This course is an introduction to the sciences of meteorology and climatology. How scientists evaluate atmospheric processes using the scientific method will be emphasized throughout the course.

**About Online Courses:**

There is really no difference in material covered between an in-person course and an online course, but there are benefits and challenges to an “online classroom” environment that need to be kept in mind when taking a fully online course such as this one, particularly if you are used to an “in-person classroom” environment. However, you will need to have good self-discipline in completing these tasks in a timely manner. This is a five-unit course. This equates to five hours of work per week during a regular quarter. This does not include the extra personal study time needed in addition to those mandatory class hours that the State of California and De Anza College requires. If you plan on mastering the material covered this quarter, you will need to make sure you 1) Are engaged in the course at least 5 hours a week (not including study time); 2) Login at least two different days during the week (to maximize your discussion participation points); 3) Study for the exams using your class lecture notes, activities, the study guide and the sample exams provided.

**Modules:**

A module is a specific and discrete learning segment that leads to the understanding of a given topic. Modules will be assigned by topic on Canvas. Modules include all assignments and tasks that will be completed for a particular topic and are to be completed within the dates specified on the syllabus (schedule is below and on Canvas). Every topic will include the following tasks to complete: 1.) Reading the assigned chapter for each module in the textbook for the course (see top of the home page for links to the chapter reading); 2.) Listening to lectures; 3.) Completing the Module Activity. In addition, it’s possible you will also have a documentary to watch. For instructions on how to complete the above tasks, please read the instructions for each task below.

**Lectures:**

Lectures will be presented online as Power Point presentations converted into a movie file that can be watched and listened to on YouTube ©. It will be expected that you take notes while listening to the lecture, much like a traditional lecture course. A benefit to a recorded lecture is you can re-listen to any topic at any time. Any questions you may have during the lecture should also be written down immediately in your notebook. Sometimes, those questions answer themselves further in the lecture. What isn’t answered should be e-mailed to me or posted in the online forum participation to get feedback from your fellow students.

Missing lectures will severely impact your ability to learn the course material, and most likely will severely hurt your grade, much like in a traditional class. Exam questions almost always come directly from these lectures, so be sure to discipline yourself to listen and take notes. Notes do not need to be turned in to me. Please keep those for studying purposes.

**Weekly Discussions (30% of your grade):**

There will be four discussion assignments this quarter. One time each week for C-level work, or several times each week (earlier and later in the week) for A-level or B-level work, you will be required to participate in an online discussion on topics involving the Earth Sciences. More details of what will be expected of you can be found by reading the instructions within each discussion assignment. Discussion posts cannot be accepted late for any reason. However, I

drop the lowest discussion assignment score from your final grade in case an emergency comes up that prevents you from completing a discussion assignment.

Some important notes:

- 1.) It is your responsibility to verify that your post actually posted onto the page before leaving a discussion;
- 2.) Biology-focused posts are considered off-topic in the discussion and won't count for credit due to this being a physical science and not a biological science course. See discussion guidelines for more information;
- 3.) There is a presumption and expectation that all work submitted is above board and honest. However, realize that grades for discussion participation (and other assignments) can be retroactively changed at any time during the quarter if plagiarism, cheating and/or dishonesty of any kind is discovered after a grade has been assigned. See the section titled "Policy on Academic Dishonesty" below for details.

### **Module Activities (50% of your grade):**

There will be ten module activities this quarter. Module activities are assignments that are completed after listening to the lectures within the module assigned that week. Module Activities are due on the date/time stated within the instructions of each assignment. These assignments are designed to help introduce important concepts in the lecture as a first step to help students master the course material in preparation for subject mastery (i.e. study for the exams!). These activities are both problem solving and/or review questions based on the lecture, module activity and/or films watched. You will turn in these activities online on Canvas. Emailed assignments are not accepted for any reason. Each activity will have submission instructions.

If you have a situation where you cannot submit an activity by its due date, I will accept most activities late without penalty, but only for a specified period of time (see activity instructions for details). Once that period of time (the grace period) has passed, I will not accept the activity for any reason, including emergencies. Be sure to submit these assignments as early as possible so a last minute emergency does not prevent you from earning these valuable points.

### **Final Exam (20% of your grade):**

There will be a timed (70 minute) exam for this course that will be an objective-type multiple-choice exam. See the schedule on the last page of this syllabus and the study guide provided later in the course for the time period you will be able to take this exam. You can choose to take the exam anytime during the exam period, but you may only take the exam one time. For example, if you take the final exam at 8 am on Monday, you won't have another opportunity to take it again.

A study guide, which will let you know the details of each exam (how many questions, etc), will be posted on the course website for studying purposes a few weeks ahead of the exam start date. A sample exam for your studying purposes will be available a few days before the exam start date.

You may use notes while you take the exam, but because the exams are timed once you start them, you should master the subjects you are being tested on before attempting an exam so that you can finish in plenty of time. I highly recommend having a small index card worth of notes nearby and your completed sample exam while you are taking the exam. Do not spend time going through your notes, the Internet, or the textbook for answers while taking the exam. That is not an indication of subject mastery and the exam is timed to prevent that from occurring.

Much like a classroom exam, once you submit your answers, your exam score will not be available to you immediately. Your score will be made available to you within a week of your finishing the exam. I will post an announcement when exam scores are ready.

**WARNING: IT IS YOUR RESPONSIBILITY TO UNDERSTAND WHEN AN EXAM OPENS AND CLOSES. IF YOU MISS AN EXAM PERIOD DUE TO MISUNDERSTANDING THE SCHEDULE, INTERNET ISSUES, CANVAS ISSUES, HOSPITAL STAY, ILLNESS OR FOR ANY OTHER REASON, EVEN IF THAT REASON IS OUT OF YOUR CONTROL, YOU WILL RECEIVE A ZERO ON THAT EXAM. NO EXCEPTIONS.**

### **Grading**

Best 3 out of 4 Discussions (100 points each)	30% (300 points)
10 Activities (50 points each)	50% (500 points)
Final Exam (200 points each)	20% (200 points)
Total Points:	100% (1000 points)

A: 920-1000	C+: 780-799	D-: 600-619
A-: 900-919	C: 720-779	F: Below 600
B+: 880-899	C-: 700-719	
B: 820-879	D+: 680-699	
B-: 800-819	D: 620-679	

### **Important note about travel:**

It is assumed that you are completing this course at home within the U.S. and that you have excellent Internet access for the entire quarter. If you need to take this course inside or outside the U.S., it will be your responsibility to make sure you have access to the course and all of its assignments. All assignments, including exams, will not be extended for you because you choose or need to travel for any extended period of time during the quarter, even if that reason is out of your control. It's important to note that many countries outside of the U.S. block the use of YouTube and the ability to watch U.S. documentaries. If you plan on travelling to a country that has these limitations, it's best to drop this course and take it during a quarter that you will not be travelling. Also, please note that all dates and times given in this course are in Pacific Time unless otherwise noted.

**Policy on Academic Dishonesty:**

A student who displays inappropriate conduct, including cheating and plagiarism, may be subject to disciplinary action. Cheating and plagiarism includes copying and pasting articles and/or other people's work in any of the discussions as if it were your own words. Any student may be expelled, suspended, placed on probation, or given a lesser sanction depending on the severity of the offense. For more information, please see the college catalog.

**Policy for Dropping Students:**

Students who have not logged into the course website on Canvas and posted their first discussion participation post or submitted their first module activity by **FRIDAY, JULY 10TH may** be dropped for non-attendance. I also reserve the right to drop any student who has not turned in any assignments for two consecutive weeks after week 1. However, it is **always** the student's responsibility to drop courses they have registered for before the drop deadline if they wish to drop.

**Note for students with disabilities:**

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor and/or DSS. Disability Support Services (DSS) will facilitate the reasonable accommodations process. DSS is located in SCS 41 and can be reached by telephone (Voice 408-864-8753/TTY 408-864-8748).

**Important Administrative Dates**

June 29<sup>th</sup> (Mon): First day of class

July 6<sup>th</sup> (Mon): Drop deadline with no record of grade

July 29<sup>th</sup> (Wed): Last day to drop with a "W"

**Course Schedule:**

**Week 1**

Module 1: Introduction to Meteorology, Due: Wed, July 1<sup>st</sup>

Module 2: Earth's Heat & Temperature, Due: Fri, July 3<sup>rd</sup>

**Discussion 1: Participation Period: Mon, June 30<sup>th</sup> – Sun, July 5<sup>th</sup>**

**Week 2**

Module 3: Humidity, Condensation & Clouds, Due: Wed, July 8<sup>th</sup>

Module 4: Atmospheric Stability, Due: Fri, July 10<sup>th</sup>

**Discussion 2: Participation Period: Mon, July 6<sup>th</sup> – Sun, July 12<sup>th</sup>**

**Week 3**

Module 5: Air Pressure & Wind, Due: Wed, July 15<sup>th</sup>

Module 6: Atmospheric Circulation and El Niño, Due Fri, July 17<sup>th</sup>

**Discussion 3: Participation Period: Mon, July 13<sup>th</sup> – Sun, July 19<sup>th</sup>**

**Week 4**

Module 7: Air Masses & Weather Fronts, Due Wed, July 22<sup>nd</sup>

Module 8: Thunderstorms, Due Fri, July 24<sup>th</sup>

**Discussion 4: Participation Period: Mon, July 20<sup>th</sup> – Sun, July 26<sup>th</sup> (Last Discussion Assignment)**

**Week 5**

Module 9: Hurricanes, Due Wed, July 29<sup>th</sup>

Module 10: Climate Change, Due Fri, July 31<sup>st</sup>

**Make-up Activity: Due no later than Sunday, Aug 2<sup>nd</sup> at 11:59 pm**

**Week 6**

**FINAL EXAM: MON, AUGUST 3<sup>RD</sup> (8 am – 11:59 pm)**

**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.