

**Logistical Information:**

<b>Course</b>	Weather & Climate Processes – Winter 2023 MET 10.63Z (CRN 32554)
<b>Instructor</b>	Bridget James
<b>Class Location</b>	Canvas: <a href="http://instructure.deanza.com">http://instructure.deanza.com</a>
<b>Office Hours</b>	Thursdays 2:00 – 3:30 pm (Canvas or Immediate email replies)
<b>Email</b>	<a href="mailto:jamesbridget@fhda.edu">jamesbridget@fhda.edu</a>

**Textbook & Materials Needed:**

- Nugent, Alison, et al, 2020, Atmospheric Processes and Phenomenon, 1<sup>st</sup> Edition, Open Educational Resource: <http://pressbooks-dev.oer.hawaii.edu/atmo/>
- Regular and reliable access to a computer with reliable high-speed Internet

**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 no difference in the content covered between an in-person course and an online course, but there are benefits and challenges that need to be kept in mind when taking an asynchronous online course such as this one. Asynchronous online courses offer much more flexibility in completion of course material than other course modalities. However, you will need to have good self-discipline in completing these tasks in a timely manner. Keep in mind that the due date should never be the “do” date. Complete assignments well before the deadline as that will go a long way towards your success in this course. Use a calendar (ideally the first week of class) to set aside “class time” to complete course requirements. If your work schedule changes week-to-week, schedule your “class time” immediately after your work schedule is set.

**Modules:**

A module is a specific and discrete learning segment that leads to the understanding of a given topic in preparation for the final exam in this course. Modules will be assigned by topic on Canvas. All modules will include the following tasks to complete: 1.) Listening to lecture(s) and completing the assigned textbook reading; 2.) Completing the Module Activity; 3.) Participating in the Discussion. 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 format that can be watched and listened to on YouTube ©. A link to each lecture will be provided. It will be expected that you take notes while listening to the lecture, much like a traditional 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 to get feedback from your fellow students (or both).

Missing lectures can severely impact your ability to learn the course material, leading to a poor grade. Exam questions almost always come directly from lectures, so be sure to discipline yourself

to listen and take notes. Then, spend the time to study the concepts learned in the lecture for mastery on the upcoming exam. Notes do not need to be turned in to me. Please keep those for studying purposes.

### **Decoding the Weather Machine (100 points and 10% of your grade)**

For this assignment, you will be watching the first hour of the two-hour film “Decoding the Weather Machine” from NOVA and answering the associated questions. This part of the film will give you a good overview of what climate change is and what meteorologists, geologists and climate scientists are uncovering on this very important topic. This will be important background as you move through the other topics in this course. Since this is a film produced for the general public, no background is needed to complete this assignment. It will be due by the end of the first week of the term on **Sunday, January 15<sup>th</sup>, 2022 at 11:59 pm**. You will find the link to this assignment within Module 1. NOTE: This assignment cannot be submitted past its grace period for ANY reason, even for reasons out of your control. See the assignment instructions within Module 1 for more information.

### **Discussions (25 points each, 250 points total, 25% of your grade):**

There will be 11 discussion assignments this semester. One time each week for C-level work, or several times each 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 discussion instructions at the top of each discussion board. Discussion posts cannot be accepted late for any reason. However, I drop the lowest discussion assignment score from your final grade.

Some important notes:

- It is your responsibility to verify that your post actually posted onto the page before leaving.
- 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.
- There is a presumption and expectation that all work submitted is above board and honest. However, realize that grades for forum participation (and other assignments) can be retroactively changed to a zero at any time during the semester if plagiarism, cheating and/or dishonesty of any kind is discovered after a grade has been assigned. Other disciplinary action is also likely. See the section titled “Policy on Academic Dishonesty” below for details.

### **Module Activities (50 points each, 500 points total, 50% of your grade):**

There will be 11 module activities this semester. Module activities are formative assessments that are completed after reading the associated chapter within your textbook and listening to the lecture within the modules 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 topics in the lecture and can be 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. However, the lowest activity score will be dropped from your final grade, making this entire assignment worth 500 points.

### **Final Exam (150 points and 15% of your grade):**

There will be one online final exam that will have 50 multiple-choice questions worth 3 points each. **The final exam will be administered online on Monday, March 27<sup>th</sup>, 2023 and available to take between 8 am and 11:59 pm**. You can choose to take the exam anytime during the exam period, but you may only take the exam one time. **Make-up exams are not offered for any reason, including**

**emergencies.** Be sure to take the exam as early in the day as possible so a last-minute emergency does not get in the way of these valuable points.

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 only a small index card worth of notes nearby. Do not spend time going through the Internet, the textbook or any other involved source for answers while taking the exam. That is not an indication of subject mastery and the exam is timed to prevent heavy reliance of such sources. Much like a classroom exam, once you submit your answers, the answers will not be available immediately. Once the exam period ends, exam scores will be released within 48 hours unless otherwise noted.

### **Grading**

Decoding the Weather Machine (100 pts).	10% (100 points)
Best 10 out of 11 Discussions (25 pts each)	25% (250 points)
Best 10 out of 11 Activities (50 pts each)	50% (500 points)
Final Exam (150 points)	15% (150 points)
Total Points for course	1000 points

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

### **Important note on final grades and extra credit:**

Grades are non-negotiable and individual extra credit is not assigned in this course. NO EXCEPTIONS. Once a final grade has been determined, I will not change it unless there is a calculation error. Borderline grades are always carefully considered before issuing a final grade. If I did not bump you up to the next grade level, you can be assured the decision was made carefully and a request to change it will not be considered. No exceptions.

### **Accessibility Accommodations:**

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)

### **Policy on Academic Dishonesty:**

A student who displays inappropriate conduct, including cheating and plagiarism, may be subject to disciplinary action. At minimum, as student will receive a “zero” for the assignment in question and will be reported to the College for further action. Cheating and plagiarism includes (but is not limited to) copying and pasting content in any of the discussions as if it were your own words. For more information on academic dishonesty, please see the college catalog.

### **Important note on attendance:**

If you have not logged into the course on Canvas within 48 hours of the start of instruction, I reserve the right to drop you from the course. I also reserve the right to drop any student who has not logged into the course website and/or completed any assignments for two weeks at any time during the term. However, it is always the student’s responsibility to drop a course they are no longer attending. **The drop deadline for Winter 2023 is Sunday, January 22<sup>nd</sup>, 2023 and the last day to drop with a “W” on your record is Friday, March 3<sup>rd</sup>, 2023.**

### **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 semester. If you need to travel, whether 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 semester, 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 or withdrawal this course and take it during a semester 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.

### **Statement on Sexual Violence**

De Anza College is committed to maintaining a safe and caring college environment. The college has established policies and procedures regarding sexual misconduct, harassment, and assault. A college website has also been developed which provides you with important information about sexual misconduct and sexual assault: <https://www.deanza.edu/titleix/index.html>

### **Course Schedule:**

Module 1: Introduction to Weather & Climate, Mon, 1/9 – Sun, 1/15

Module 2: Heat & Temperature, Mon, 1/16 – Sun, 1/22

Module 3: Humidity, Condensation and Clouds: Mon, 1/23 – Sun, 1/29

Module 4: Atmospheric Stability & Precipitation, Mon, 1/30 – Sun, 2/5

Module 5: Air Pressure & Wind, Mon, 2/6 – Sun, 2/12

Module 6: Atmospheric Circulation, Mon, 2/13 – Sun, 2/19\*

Module 7: Air Masses & Weather Fronts, Mon, 2/20 – Sun, 2/26\*

Module 8: Thunderstorms, Mon, 2/27 – Sun, 3/5

Module 9: Hurricanes, Mon, 3/6 – Sun, 3/12

Module 10: Climate Change, Mon, 3/13 – Sun, 3/19

Module 11: Climate Change II, Mon, 3/20 – Sun, 3/26 – NO GRACE PERIOD

**FINAL EXAM: MONDAY, MARCH 27<sup>TH</sup>, 2023 (Open between 8 am and 11:59 pm)**

\*Presidents Day holiday falls between Friday, February 17<sup>th</sup> and Monday, February 20<sup>th</sup>. However, Modules 6 and 7 will remain open for those of you who would like to use the holiday to complete these modules.

**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:**

TH	02:00 PM	03:30 PM	Canvas,Email
TH	03:30 PM	05:00 PM	Canvas,Email