Physical Science, Math & Engineering Division
Earth & Space Science Program - Dept. of Meteorology

Logistical Information:

- **Course**: Weather & Climate Processes - MET 10.65Z (11744)
- **Term:** Summer 2026
- **Instructor:** Dr. Bridget James
- **Class Location**: http://deanza.instructure.com
- **Office Hours**: Wednesdays 2 - 3 pm (Canvas Messaging or Email)
- **E-mail**: jamesbridget@fhda.edu

Course Description:

Introduction to the principles of the sciences of meteorology and climatology, including the history of the sciences; origin, evolution, and structure of the atmosphere; major atmospheric variables that determine weather; global and local wind circulations; air masses and frontal systems; birth and development of extratropical and tropical cyclones and associated severe weather phenomena; weather map analysis and interpretation; objective techniques used by meteorologists to forecast weather; air pollution; atmospheric optics, global climate and the processes that produce climate change including "global warming."

Textbook & Materials Needed:

- Nugent, Alison, et al, 2020, Atmospheric Processes and Phenomenon, 1st Edition, Open Educational Resource
- Regular and reliable access to a **computer** with high-speed Internet. Use a smart phone is at your own risk and not advised.

Assignment Points Distribution

Assignment	Points per Assignment	Total Points Possible	Grade Weight (%)
Best 3 out of 4 Discussions	100 points each	300 points	30%
Best 10 out of 11 Module Activities	50 points each	500 points	50%
Midterm Project	100 points each	100 points	10%

Assignment	Points per Assignment	Total Points Possible	Grade Weight (%)
Final Exam	100 points each	100 points	10%
Total points for term		1000 points	100%

Grading Scale

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

Schedule of Topics

Week	Assignments
Week 1 Mon, 6/29 – Sun, 7/5*	Orientation (Due Mon) Module 1 - Introduction to Weather & Climate (Due Tue) Peer Discussion 1 Initial Post (Due Thurs) Module 2 – Heat & Temperature (Due Thurs) Peer Discussion 1 Peer Reply (Due Sun) Module 3 - Humidity, Condensation, & Clouds (Due Sun)
Week 2 Mon, 7/6 – Sun, 7/12	Module 4 – Atmospheric Stability & Precipitation (Due Tue) Peer Discussion 2 Initial Post (Due Thurs) Module 5 – Air Pressure & Wind (Due Thurs) Peer Discussion 2 - Peer Reply (Due Sun) Midterm Project (Due Sun)
Week 3 Mon, 7/13 – Sun, 7/19	Module 6 - Atmospheric Circulation & El Niño (Due Tues) Peer Discussion 3 - Initial Post (Due Thurs) Module 7 – Air Masses & Weather Fronts (Due Thurs) Peer Discussion 3 - Peer Reply (Due Sun) Module 8 - Thunderstorms (Due Sun)

Week	Assignments
Week 4 Mon, 7/20 – Sun, 7/26	Module 9 – Hurricanes (Due Tues) Peer Discussion 4 Initial Post (Due Thurs) Peer Discussion 4 Peer Reply (Due Sun)
Week 5 Mon, 7/27 – Sun, 8/2	Module 10 – Climate Change I (Due Tues) Module 11 – Climate Change II (Due Thurs)
Week 6 Mon, 8/3 – Wed, 8/5	**Final Exam**

*Independence Day is observed on Fri 7/3 - Sat 7/4. Modules will be open for those of you who would like to use this time period to complete assignments.

Student Learning Outcomes (SLOs):

- 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.

About Asynchronous Online Courses:

The content covered between an in-person and an online course is the same, but some benefits and challenges must be considered when taking an asynchronous online course such as this one. Asynchronous online courses offer much more flexibility in completing course material than other course modalities. However, you must have good self-discipline in promptly completing these tasks. Remember that the due date should never be the “do” date. Completing assignments well before the deadline will go a long way toward your success in this course. Use a calendar to set aside “class time” to satisfy course requirements. If your work schedule changes week-to-week, schedule your “class time” immediately after your work schedule is set. This proactive approach will greatly enhance your success in the course.

Time Commitment:

This course is a 5-unit quarter course. During a regular 10-week quarter, this equates to 5 hours per week of instruction and 10 hours per week of assignments and study time. During an accelerated six-week summer session, you should plan to spend at least 38 hours per week on this course instead.

About Online Office Hours:

The time listed as "online office hours" is time dedicated to you. We can discuss course assignments, topical interests, career choices, or anything else to help you succeed in this course or along a career path. Just send me an email to get the conversation started. I look forward to connecting with you!

My official office hours are **Wednesdays from 2-3 pm**. During that time, I check my email often and usually reply within about 10 minutes, answering messages in the order they arrive. You're also welcome to email me anytime outside of office hours. I often respond quickly, but depending on my schedule it might be later in the day or the following morning. I usually step away from email on Fridays and Saturdays, since those tend to be the quietest days, so you may not hear from me until Sunday. You can see my full communication plan on Canvas anytime. You can find it at the bottom of the "Home" page.

Modules:

A module is a specific and discrete learning segment that leads to understanding a given topic in preparation for the final exam in this course. Modules are organized by topic in Canvas and typically include lectures, readings, other learning materials, and Module Activities. In addition to Module tasks, there will be Peer Discussion assignments, a Midterm Project, and a Final Exam for this course. Please read the instructions below for details about each of these course components.

Lectures:

Lectures will be presented online as PowerPoint presentations converted into a format that can be watched and listened to on YouTube ©. A link to each lecture will be provided. Like a traditional course, you will be expected to take notes while listening to the lecture. A benefit to a recorded lecture is that you can re-listen to any topic anytime. 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. 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, study the concepts learned in the lecture for the upcoming exam. Notes do not need to be submitted. Please keep those for reviewing purposes.

Peer Discussions (100 points each, 300 points total, 30% of your grade):

There will be four peer discussion assignments this term. For this assignment, you are being graded on how well you are **engaging your peers** on a selection of current events chosen by your instructor within the Earth Sciences. The Initial Post will be due no later than **Thursdays** and the Peer Reply will be due no later than **Sundays** each week a discussion is open. Because this assignment is graded on active engagement with your peers, once a discussion has closed, it can't be re-opened for any reason. However, the lowest scored Peer Discussion will be dropped from your final grade. There are other important parameters to the discussion assignment that you will need to be aware of **so be sure to refer to the assignment instructions on Canvas for detailed expectations, requirements, and grading rubric**.

Important warning: Leaving the discussion board too soon after hitting the "Submit" button may prevent your work from posting. It will be your responsibility to confirm that your post has posted onto the discussion board before leaving Canvas so you do not lose credit for your work.

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

There will be eleven module activities this term. The lowest scored module activity will be dropped from your final grade in the course. Module activities are individual formative assessments completed after reading the associated textbook chapter(s) and viewing the lectures for the modules. See the assignments themselves for their respective due dates. These assignments are designed to help you understand important topics in the lecture. They can include problem-solving and/or review questions based on the lecture 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 an urgent situation where you cannot submit an activity during its submission period, you **may** be granted a **short** grace period (at the instructor's discretion) so that you may still complete the assignment without penalty. See the assignment instructions on Canvas for details.

Midterm Project - Weathering the Future (100 points and 10% of your grade)

For this project, you will watch the film “Weathering the Future” (53 minutes) and answer the associated questions. This assignment will give you a good overview of climate change and how it is affecting people, ecosystems, and communities around the world. It will be due on **Sunday, July 12, 2026 at 11:59 pm**, but you can complete the project at any time before its due date (recommended).

If you have an urgent situation where you cannot submit the Midterm Project during its submission period, you may be granted a short grace period (at the instructors discretion) so that you may still complete the assignment without penalty. See the assignment on Canvas for details.

Final Exam (100 points, 10% of your grade):

There will be one online (timed) cumulative final exam that will have 50 multiple-choice questions worth 2 points each, where questions will appear one at a time on the screen. **The final exam will be administered online from Monday, Aug 3, starting at 8 am to Wednesday, Aug 5, ending at 11:59 pm.** You can take this timed 50-minute exam anytime during this submission period, but you may only take the exam one time. Planning to take the Final Exam towards the end of the exam period is at your own risk. Be sure to take the exam as early as possible in the exam period so a last-minute emergency does not get in the way of these valuable points. **Make-up exams are not offered for any reason, including emergencies**.

Course Support and Grading Policies:

This course is designed with built-in flexibility to support your success. Your lowest Peer Discussion and Module Activity score will be dropped from your final grade, and a grace period

is available for most module activities where noted. These policies are intended to provide flexibility as you manage your time throughout the term.

At the same time, to ensure academic integrity, fairness and consistency for all students, assignments and exams are not reopened once closed, final course grades are not negotiated, and extra credit is not offered either individually or course-wide.

This course is not designed to accommodate missing assignments over an extended period of time, even with advanced notice. It operates on a set schedule and is not self-paced, so please plan accordingly. If unforeseen circumstances out of your control arise during the term, a withdrawal may be necessary. If we are past the withdrawal deadline for the term, an excused withdrawal may be possible through the registrar's office.

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).

Important note about travel:

This course assumes you will have reliable internet access in the United States for the entire semester. If you travel, whether within or outside of the United States, it is your responsibility to maintain full access to the course and all assignments in Canvas. Deadlines, including exams, cannot be extended due to travel. Please also be aware that some countries restrict access to platforms such as YouTube and U.S.-based media, and access to course content may not be consistent or reliable, even with a Virtual Private Network (VPN). If you anticipate these limitations, you should consider taking the course during a term when you are not traveling. If travel is out of your control and occurs after the college withdrawal deadline, you may be eligible for an Excused Withdrawal from the course. Please contact the Registrar's Office at De Anza College for more information. All dates and times are listed in Pacific Time unless otherwise noted.

Important note on attendance:

If you have yet to log into the course on Canvas within three days of the start of instruction, I reserve the right to drop you from the course (primarily to make room for students on the wait list). I also reserve the right to drop any student who has yet to log into the course website and/or complete any assignments by the end of the second week. However, it is always the student's responsibility to drop a course they are no longer attending. **The drop deadline for Summer 2026 is Monday, July 6th, 2026, and the last day to drop with a "W" on your record is Thursday, July 30th, 2026.**

Course Intellectual Property:

Students may not post any course materials to any third-party sites or post any recordings, screenshots, audio, or chat transcripts in any setting outside of this class. Violations are subject to disciplinary action. In addition, students may not capture audio, photos, or video from class sessions on their own devices without the explicit permission of the instructor and everyone present, unless part of a DSPS-authorized accommodation.

Artificial Intelligence (AI) Policy:

You are welcome to use AI tools as a thought partner in your learning process, much like you would use a study group, writing center, or other resources. If you directly quote or closely paraphrase AI-generated text, you must cite the tool and share the part of the text that was AI generated. AI-generated words do not count towards the required word count in peer discussion assignments. Only **your own words** count toward that total. Also, AI tools can make mistakes, and is truly capable of making up scenarios that are simply untrue. You are responsible for the accuracy and integrity of all work submitted. Always be very careful what you put your name next to.

Policy on Academic Dishonesty:

There is a presumption and expectation that all work submitted is above board and honest. Any instances of cheating, deceit, fabrication, forgery, plagiarism, unauthorized altering of records or submitting false documents, unauthorized collaboration, unauthorized submission of work previously given credit, or other forms of academic misconduct will be assigned a grade penalty, likely an F or a grade of zero. Failing one or more assignments or examinations for reasons of academic integrity violations may result in a final class grade of F. Students may not withdraw from classes in which they have committed academic misconduct. Consequences for violations of academic integrity may exceed an F on the assignment, examination, or class as determined by the Academic Integrity Review Committee. For more information on academic dishonesty, please see the college catalog.

Members of our academic community have a responsibility to develop an awareness of academic integrity, to cultivate skills to realize honesty in academic and community work, and to sustain actively academic honor as a core value of our community. Students are expected to engage in behaviors that reflect well upon the college. In addition to attending to one's own actions, the Standards for Student Conduct require that students who witness academic dishonesty notify their faculty/instructor, dean, or the Vice President of Instruction. Supporting academic integrity enhances the reputation of the college and the value attributed to degrees awarded.

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: De Anza College Title IX information

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:

2:00 PM - 3:00 PM	CanvasW
3:00 PM - 4:00 PM	CanvasW