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

Logistical Information:

- **Course**: Weather & Climate Processes
- **Section Number:** MET 10.64Z (42780)
- **Instructor:** Dr. Bridget James
- **Term**: Spring 2026
- **Class Location**: deanza.instructure.com
- **Office Hours**: Wednesdays 2 - 4 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.

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:

Asynchronous courses like this one are not self-paced. They do however offer much more flexibility in how you complete course material compared to other course formats. For example:

- In-Person or Synchronous Online Course: Attend lectures and complete some assignments on set days and times (e.g., Mondays and Wednesdays from 9:30-11:30 am).
- Asynchronous Course (this class): Complete lectures and assignments over a longer, but still structured, time frame, without coming to campus.

This flexibility can be very helpful for managing your overall schedule, which is why these courses are so popular. However, it also requires strong self-discipline to stay on track each week. Remember that the due date should never be the "do" date. Completing assignments well before the deadline will go a long way toward your overall success in this course.

About Office Hours:

The time listed as "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! I look forward to connecting with you!

My official office hours this term are Wednesdays from 2-4 pm. During that time, I check my email frequently and typically respond 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, replies may come later in the day or the following morning. I generally step away from email on Fridays and Saturdays, as those tend to be the quietest days, so you may not hear from me until Sunday if you email during that time. You can see my full communication plan on at the bottom of the course home page.

Modules:

A module is a specific and discrete learning segment that leads to understanding a given topic in preparation for the midterm and final exam in this course. Modules include 1.) Lectures; 2.) Reading; 3.) Module Activities. Each week on Monday mornings, the "Home" page for the course will change to reflect the new module and its associated assignments for that week. If you are on your computer or a tablet, you will see this home page immediately upon entering the course.

In addition to Module assignments, there will be Peer Discussions, a Midterm Exam, and a Final Exam throughout the term. Please read the instructions below for the details of each of these assignments.

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 (60 points each, 300 points total, 30% of your grade):

There will be six peer discussions this term. The lowest scored Peer Discussion will be dropped from your final grade in the course. 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. Last-minute submissions before a deadline are always at your own risk. Posting well before the deadline removes this risk. 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. See the course schedule above for the weeks the Peer Discussion is assigned this term.

Important notes:

- It is your responsibility after clicking "Submit" to confirm that your post appears on the discussion board before leaving Canvas. This will ensure you receive credit for your work.
- Your first (Initial) post is the one that will be graded, regardless of content. Any subsequent posts submitted as an "Initial Post" will not receive credit. Initial posts are required to be completed independently. Submitting a blank post or reworked post as an Initial post gives an unfair advantage and will not receive credit.
- Posts submitted for credit must be entered as text in the provided text box. File uploads or external links will not be accepted.

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

There will be ten module activities this term. Module activities are individual assignments completed after reading the associated textbook chapter(s) and listening to the lecture within the modules. Module Activities are due on the date/time stated within the instructions of each assignment. These assignments are designed to help you understand important topics in the lecture. They can be both 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 automatically so that you may still complete the

assignment without penalty. This is dependent on availability. See the assignment on Canvas for details.

Exams (100 points each, 200 points total, 20% of your grade):

There will be a midterm and final exam administered on Canvas this term. Exams in this course are designed to support both learning and academic integrity. Each exam is timed and presented one question at a time. Question order and format may vary between students. You may move between questions during the exam, but you will need to manage your time carefully to complete all questions in the allotted time. The time limit is intentionally set to encourage preparation and familiarity with the material rather than reliance on outside resources. Overall, exams are intended to reflect your understanding of course concepts and your ability to apply them independently.

You may take each 50-minute exam anytime during the submission window, but only one attempt is allowed. Be sure to take each exam early in the window in case unexpected issues arise later. Once the exam window closes, the exam cannot be re-opened. Grades will have been released to the class, and allowing access afterward would compromise exam integrity.

Exam answers will not be released after submission. Only your score will be available. This policy is in place to maintain the integrity of the exam. Instead, general feedback and guidance on key concepts can be provided to support your understanding of the material.

Exam Schedule:

Midterm Exam (Modules 1-5): Friday, May 15 at 8:00 am - Sunday, May 17 at 11:59 pm
Final Exam (Modules 6-10): Monday, June 22 at 8:00 am - Wednesday, June 24 at 11:59 pm

Course Support and Grading Policies:

This course is designed with built-in flexibility to support your success. Your lowest Peer Discussion 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.

Assignment Points Distribution

Assignment	Points per Assignment	Total Points Possible	Grade Weight (%)
Best 5 of 6 Peer Discussions	60 points each	300 points	30%
Module Activities (10 total)	50 points each	500 points	50%
Midterm Exam (Modules 1-5)	100 points	100 points	10%
Final Exam (Modules 6-10)	100 points	100 points	10%
Total points possible		1000 points	100%

NOTE: Be sure to check your grades and instructor feedback as soon as they are posted. Reviewing feedback promptly helps you make adjustments on later assignments while there is still time to do so.

Grading Scale

Grade	Points Needed	Grade	Points Needed
*A+	1000-990	C+	799-780
A	989-920	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

**Note: In the Foothill-De Anza Community College District, an A+ is treated the same as an A in GPA calculations. It serves solely as recognition of truly exceptional work.*

***Course Schedule:**

Date	Assignment
Mon, 4/6 - Sun, 4/12	Module 0 - Orientation Module 1 - Introduction to Weather & Climate Peer Discussion 1 (Initial Post by 4/9; Peer Reply by 4/12)
Mon, 4/13 - Sun, 4/19	Module 2 - Heat & Temperature
Mon, 4/20 - Sun, 4/26	Module 3 - Humidity, Condensation, & Clouds Peer Discussion 2 (Initial Post by 4/23; Peer Reply by 4/26)
Mon, 4/27 - Sun, 5/3	Module 4 - Atmospheric Stability & Precipitation
Mon, 5/4 - Sun, 5/10	Module 5 - Air Pressure & Wind Peer Discussion 3 (Initial Post by 5/7; Peer Reply by 5/10)

***Course Schedule:**

Date	Assignment
Mon, 5/11 - Sun, 5/17	**Midterm Exam Week:** **Study Period (Mon, May 11 -Thurs, 5/14)** **Midterm Exam (Fri, May 15 -Sun, May 17)**
Mon, 5/18 - Sun, 5/24	Module 6 - Atmospheric Circulation and El Niño Peer Discussion 4 (Initial Post by 5/21; Peer Reply by 5/24)
Mon, 5/25** - Sun, 5/31	Module 7 - Air Masses & Weather Fronts
Mon, 6/1 - Sun, 6/7	Module 8 - Thunderstorms Peer Discussion 5 (Initial Post by 6/4; Peer Reply by 6/7)
Mon, 6/8 - Sun, 6/14	Module 9 - Hurricanes
Mon, 6/15 - Sun, 6/21	Module 10 - Climate Change Peer Discussion 6 (Initial Post by 6/18; Peer Reply by 6/21)
Mon, 6/22 - Wed, 6/24	**Final Exam (Mon, June 22 - Wed, June 24)**

*This schedule can be changed without notice. However, notice will almost always be given unless their are unforeseen circumstances preventing such notice.

**Memorial Day falls on Monday, May 25th. Modules will still be open for those of you who would like to use this day to complete assignments.

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 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 yet to log into the course website and/or complete any assignments by the end of the first week. However, it is always the student's responsibility to drop a course they are no longer attending. **The drop deadline for Spring 2026 is Sunday, April 19th, 2026, and the last day to drop with a "W" on your record is Friday, May 29th, 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):

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• 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:

W	2:00 PM - 4:00 PM	Canvas