

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

**Logistical Information:** 

Course	Meteorology 10 – Weather & Climate Processes	
Section	50Z (CRN 21569)	
Term	Fall 2021	
Instructor	Bridget James	
Class Location	ONLINE - http://canvas.deanza.edu	
Office Hours	Wednesdays 2:00 – 4:00 pm	
Office Location	Online/Email	
Email	jamesbridget@fhda.edu	

#### **Required Materials:**

- 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 a good and reliable 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 no difference in the content 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 asynchronous online course such as this one, particularly if you are used to an "in-person classroom" environment. An asynchronous online classroom offers much more flexibility in completion of course material. However, you will need to have good self-discipline in completing these tasks in a timely manner. You should plan on working at least 5 hours per week this term. This includes the following: 1.) Participating in a weekly discussion; 2.) Completing everything assigned within each module; 3.) Studying for the exams; and 4.) Taking exams when available. More information on all of these assignments can be found below. Success tip: Avoid "last-minute" completion of modules, and work ahead when and where possible. This puts you in control of your success in the course. If you have a calendar, use it to schedule when you will work on modules and stick to it. If you do not keep a calendar, strongly consider starting one for this course.

# **Modules:**

A module is a specific and discrete learning segment that leads to the understanding of a given topic. Modules are 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). All modules will include the following tasks to complete: 1.) Listening to lectures; 2.) Completing the module activity. 3.) Forum/Discussion participation.

# **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.

# Weekly Discussions (20% of your grade):

There will be eleven weekly discussion assignments this term. More details of what will be expected of you can be found by reading the assignment instructions. 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; 3.) There is a presumption and expectation that all work submitted is above board, honest, and not plagiarized. Grades can be retroactively changed anytime during the term where dishonest and/or plagiarized work has been later found on any assignment in this course. See the section titled "Policy on Academic Dishonesty" below for details. The lowest Discussion Participation score will be dropped from your final grade (see "Grades" below for details).

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

There will be eleven module activities this term. Module activities are assignments that are completed after reading the associated chapter within your textbook and listening to the lecture associated with that module. 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 formative assessment to help students master the course material in preparation for 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. The lowest scored module activity will be dropped from your final grade (see "Grades" below for details).

### Exams (30% of your grade):

There will be three online timed (60 minute) multiple-choice exams for this course. See syllabus and study guide for date and time of exam availability. You can choose to take the exams anytime during the exam period. 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 ahead of the exam start date. 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 few days of the exam closure. The lowest scored exam will be dropped from your final grade. Note: It is your responsibility to understand when an exam opens and closes. If you miss an exam 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 (but it will also be the one dropped from your final grade – see "Grades" below for details). No exceptions.

### **Grading**

10 out of 11 Discussions (20 points each)	20% (200 points)
10 out of 11 Module Activities (50 points each)	50% (500 points)
2 out of 3 Exams (150 points each)	30% (300 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 on final grades and extra credit:**

Grades are non-negotiable and individual extra credit is not assigned in this course. 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

#### **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 **SUNDAY**, **SEPTEMBER 26**<sup>TH</sup> 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 the first week. However, it is <u>always</u> the student's responsibility to drop courses they have registered for before the drop deadline.

# **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 term. 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 term, 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 term 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.

# **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 Administrative Dates:**

- Sept 20<sup>th</sup> (Mon): First day of class
- Oct 3<sup>rd</sup> (Sun): Drop deadline with no record of grade
- Nov 12<sup>th</sup> (Fri): Last day to drop with a "W"

# **Course Schedule:**

#### **PART I:**

Module 1: Introduction to the Atmosphere, Sept  $20^{th} - 26^{th}$ 

Module 2: Earth's Heat & Temperature, Sept 27th – Oct 3rd

Module 3: Humidity, Condensation & Clouds, Oct 4<sup>th</sup> – 10<sup>th</sup>

Module 4: Atmospheric Stability & Precipitation, Oct 11th – 17th

EXAM #1: MONDAY, OCTOBER 18<sup>TH</sup> - OPEN BETWEEN 8 AM – 11:59 PM

### **PART II:**

Module 5: Air Pressure & Wind, Oct 18th – 24th

Module 6: Atmospheric Circulation & El Nino, Mon, Oct 25<sup>th</sup> – 31<sup>st</sup>

Module 7: Air Masses & Weather Fronts, Nov 1st – 7th

EXAM #2: MONDAY, NOVEMBER 8<sup>TH</sup> - OPEN BETWEEN 8 AM - 11:59 PM

### **PART III:**

Module 8: Thunderstorms, Nov 8th – 14th \*

Module 9: Hurricanes, Nov 15th - 21st

Module 10: Climate Change, Part I, Nov 22<sup>nd</sup> – 28<sup>th</sup> \*\* Module 11: Climate Change, Part II, Nov 29<sup>th</sup> – Dec 5<sup>th</sup>

EXAM #3: MONDAY, DECEMBER 6<sup>TH</sup> - OPEN BETWEEN 8 AM - 11:59 PM

<sup>\*</sup> Note that Thursday, November 11<sup>th</sup> is the Veterans Day Holiday. However, Module 8 will stay open on this date for those of you who would like to use the holiday to complete these assignments.

<sup>\*\*</sup>Note that Thursday, November 25<sup>th</sup> – Sunday, November 27<sup>th</sup> is the Thanksgiving Holiday. However, Module 10 will stay open on these dates for those of you who would like to use the holiday to complete these assignments. If you would like to celebrate the holiday without working on these assignments, you will need to have Module 10 completed by Wednesday, November 24th.

# **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.