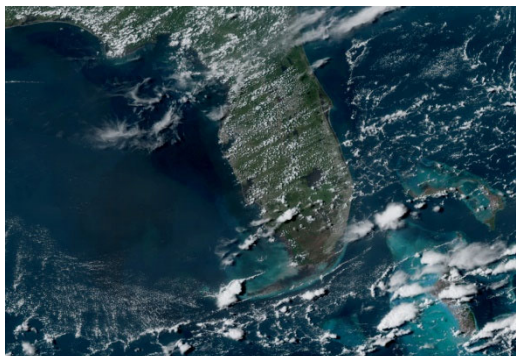# MAP DISCUSSION
ATMS 271
SPRING 2024

A map discussion is a conversation among peers about the meteorology manifested in weather maps, satellite and radar images, numerical models, thermodynamic diagrams, and more. All atmospheric sciences majors are invited to attend course meetings where we will explore *why* the atmosphere behaves as it does, what resources meteorologists use to make forecasts, and how to find and interpret numerical model guidance and the latest observations of our atmosphere. Weekly map discussions will consider live weather situations in an interactive setting. This is perhaps the best way to learn about meteorology because we assess the live weather situation and learn from one another about real-world scenarios. Ask lots of questions and have fun!

PROFESSOR

Dr. Christopher Godfrey
Office: Rhoades/Robinson Hall, room 253
Phone: 828-232-5160
E-mail: cgodfrey at unca dot edu
Office hours: 3:45–4:45 p.m. Wednesdays and 12:45–1:45 p.m. Thursdays, or by appointment. You may call my office (it bounces to my cell phone) during regular business hours. You may send me as many email messages as you wish. If my door is open at any other time, please drop in.

CLASS INFORMATION

Meeting times: W 11:00 a.m.–12:15 p.m.
Location: Robinson Hall, room 211
Required text: None.
This course may be repeated for a total of 8 hours of academic credit, but the course will not count toward atmospheric sciences elective requirements.

COURSE FORMAT AND EVALUATION

Each class meeting will involve a map discussion. There are no lectures, quizzes, or tests. Participants enrolled in this course for credit must satisfy the following criteria:

- Attend weekly class meetings and *actively* participate in map discussions.
- Participate in the WxChallenge, the North American collegiate weather forecasting competition.
- Lead one or more weekly map discussions.

Active participation in a map discussion requires that you ask a question, answer others' questions, request to look at certain data sources, offer plausible explanations about the current topic, and generally participate in the conversation. Attending class without saying anything at all is not active participation and this will be reflected in your grade. At the same time, there is no need to dominate the conversation, so please allow others to contribute.

The WxChallenge is a national forecasting competition. As part of the UNC Asheville team, you will make your own daily forecasts Monday through Thursday during the competition, including during Fall Break. You can record your forecasts several days in advance and change them until just before 0000 UTC prior to the 0600 to 0600 UTC forecast period. You will receive further details about the WxChallenge shortly before the competition begins.

Map discussion leaders will come prepared with an interesting topic and a selection of websites to explore *before* arriving in the classroom. The job of a map discussion leader is to facilitate the conversation about their selected topic. Please show some evidence of preparation when it is your turn to lead the map discussion. Depending upon the number of people in the class, map discussions may be led by two people who have shared the responsibility for topic selection and preparation.

GRADING

Attendance and participation	65%
WxChallenge	20%
Map discussion lead	15%

Your attendance and participation grade is based on the following formula:

$$\left(0.5n[1+(p/10)]-a+b\right)/n,$$

where n is the total number of map discussions during the semester, a is the number of missed map discussions, p is the number of points earned for meaningful participation in the discussion, and b is a bonus provided at the discretion of the instructor for exceeding expectations (e.g., sharing deeply thoughtful questions or insights). Anyone may earn up to 2 points per class for meaningful participation for a total of up to 10 points during the semester. Arriving more than 15 minutes late will be counted as a missed class. Rare accommodations for excused absences shall be at the discretion of the instructor (see my other syllabi). The attendance and participation grade may not exceed 100%.

Your WxChallenge grade is based on the weighted average of the mean score for each forecast city (calculated by the WxChallenge scoring algorithm) at the end of the fall competition (40%), a missed forecast penalty (50%), and forecast score variance (10%), plus a bonus for improvement over the semester. The mean score grade is 100 if the mean score is less than -1, 95 if the mean score is less than 0, 90 if the mean score is less than 1, and so on with a 5-point reduction for each integer increase in score. Each missed forecast (shown in the results as a climatological forecast) will result in a 5-point penalty for the missed forecast score. A default model guidance forecast will receive a 1-point penalty. Variance in the WxChallenge score is a measure of consistency for each city. Lower variance is better. Variance less than 10 (dimensionless) earns a 100, less than 15 earns 95, and so on with the following variance/grade pairs: 30:90, 60:85, 90:80, 120:75, 150:70, 200:65. Variance greater than 200 earns a 60. A bonus will be awarded for marked improvement (but please do not perform poorly in the beginning on purpose).

Your grade for leading map discussions depends on your level of preparation and your ability to interact with the class and direct the conversation. Partners must share the leadership responsibilities equally.

You are guaranteed *at least* the following based on your final score before applying any curve:

A	≥92.0%	C	72.0–77.9%
A-	90.0–91.9%	C-	70.0–71.9%
B+	88.0–89.9%	D+	68.0–69.9%
B	82.0–87.9%	D	60.0–67.9%
B-	80.0–81.9%	F	<60.0
C+	78.0–79.9%		

NOTES

University of North Carolina at Asheville is committed to making courses, programs and activities accessible to persons with documented disabilities. Students requesting accommodations and/or academic adjustments must do so through the Office of Academic Accessibility and may be required to provide supporting documentation. All information provided will remain confidential. For more information, please contact the Office of Academic Accessibility at (828) 232-5050 or academicaccess@unca.edu or visit them in the Academic Success Center.

PANDEMIC ADDENDUM

Students who attend class in-person instead of virtually tend to earn better grades. Yet common illnesses and new variants of the COVID-19 virus still circulate, and I want this and every classroom to be a safe and healthy place for everyone. Please always demonstrate respect for yourself, your classmates, your professor, and their families and friends. If you have been exposed to COVID-19, influenza, RSV, or any other illness (i.e., someone you have been around within the last three days has tested positive or displayed obvious symptoms), tested positive yourself within the past five days, or have any symptoms (e.g., fever, runny nose, congestion, sore throat, lethargy, etc.) please **DO NOT COME TO CLASS**. I can livestream map discussions via Zoom with sufficient notice (send me an email a few hours beforehand). There will be *no penalty* if you need to participate remotely to promote safety!