SEVERE WEATHER FIELD EXPERIENCE
ATMS 473
SUMMER 2024

You've studied the weather. Now experience the weather. As a participant in this course, you will travel to the Great Plains to forecast and observe severe weather from 13–24 May 2024. Operations will be based in Norman, Oklahoma, in the heart of tornado alley and close to the location of the climatological maximum in tornado frequency during mid-May. Norman is the home of the National Weather Center, which houses numerous NOAA and University of Oklahoma weather and climate programs including the Storm Prediction Center, the National Severe Storms Laboratory, and a National Weather Service forecast office. You will receive a tour of these and many other facilities and will hear prominent speakers discuss important aspects of severe weather forecasting. Ask lots of questions and enjoy!

INSTRUCTORS

Drs. Christopher and Elaine Godfrey
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CLASS INFORMATION

Pre-departure meeting:	1500-1700 EDT Wednesday 8 May 2024
Travel dates and times:	0800 EDT 13 May 2024 to 2300 EDT 24 May 2024
Location:	The big white van
Required text:	None
Web site:	https://www.atms.unca.edu/cgodfrey/courses/swfex/

EXPECTATIONS

It is important for you to recognize that chasing storms is a tricky business. Participating in this course does not in any way guarantee that you will see tornadoes or even a single thunderstorm. However, your instructors will do their best to guide you to the best location to see storms if they exist. With that in mind, we expect that you will participate in discussions and forecast exercises, take an active role during chase mode, and behave appropriately with courtesy and professionalism at all times. Do not engage in illegal activities. Please understand that we must make many difficult decisions during this trip. While we highly encourage your input, we retain the final say in all decisions regarding target areas, storm selection, scheduled activities, places to spend the night, et cetera, and will do our best to accommodate everyone's needs. Please do not complain after a decision has been made or if a day does not pan out the way you had hoped. We all want to have an enjoyable and successful trip!

SCHEDULED ACTIVITIES

*Please see the course website for an updated itinerary and several flexibly-scheduled presentations and events.

NOTES

Students with disabilities who require accommodations in this course are requested to speak with the professor as soon as possible. Students requiring reasonable accommodations must register with the Office of Academic Accessibility by providing supporting documentation. The Office of Academic Accessibility is located in the OneStop Student Services Center, 011 Ramsey Library, phone (828) 232-5050.

COURSE REQUIREMENTS

Satisfactory completion of several course requirements will determine your final grade:

1) Application essay	5%
2) Completion of Advanced SKYWARN spotter training	5%
3) Attendance at pre-departure meeting	10%
4) Readings (checked by successful Moodle login)	5%
5) Participation	45%
6) Daily journal (Due 1700 EDT 28 June 2024)	10%
7) Final paper (Due 1700 EDT 28 June 2024)	20%

Readings

Several articles, essays, and videos will appear on either the class website or the secure access version accessible via Moodle. While not specifically graded (except for a check on your successful access to Moodle), I encourage you to read or view these items since you will likely gain a greater depth of understanding when you are out in the field. You may also find it useful to discuss concepts from the readings and videos in your final paper.

Participation

You are expected to participate actively in forecasting activities; to contribute your thoughts and well-argued opinions regarding target areas, storm selection, and post-chase analyses; to assist with navigation; and to communicate clearly any necessary information when appropriate. Please do not use headphones in chase mode so that you can pay attention to discussions and rapidly changing conditions. Please ask questions during and after guest presentations. You are expected to attend all group activities outlined in the itinerary, in addition to any seminars and tours that will be announced. You are expected to behave appropriately with courtesy and professionalism, whether in the van or at hotels, restaurants, and government or private facilities. Please use clean language for the duration of the trip.

Daily Journal

Please keep a journal of your daily experiences. Share and reflect on what you learned during tours, presentations, and activities, not simply what you saw or who you met. On chase days, this journal will include your own target area forecasts and the reasoning behind those forecasts. It is acceptable to agree or disagree with the final group decision, but please provide justification for your target decision. The journal should also include your observations throughout the day, both meteorological and with regard to the storm chasing experience. You are not expected to take time to write in your journal during active chase situations, but please fill in the details later. This is a formal writing assignment, so please use proper spelling and grammar. Please turn in your journal with your final paper (see below).

Final Paper

Upon your return, please write a brief paper (4–6 pages of double-spaced text with 12-pt font) that analyzes the synoptic environment and the timing, location, and occurrence of storms for a particular case study. Include a discussion of the accuracy of the official forecasts from the Storm Prediction Center and how those forecasts compare with your own forecast. This case study should be for a chase day during your trip. Show relevant graphics (e.g., maps or imagery) and also share a description of your own experience with the storms for this case study, including pictures if you have them. Pictures and figures are not included in the page limits. Recognizing that many of you have completed different levels of coursework, this paper will be graded based on the expected level of understanding and scholarship for someone in your position. Of course, I expect that you will demonstrate your impeccable spelling and grammar skills. *The final paper is due via Moodle on or before 1700 EDT 28 June 2024*. This due date is firm and there will be no exceptions, even if you are suffering from the rigors of summer vacation.

LANGUAGE

Storm chasing is sometimes stressful or exciting and some may exhibit a propensity for foul language (i.e., naughty words that you would not hear on public broadcast media before 8 p.m.). Much of this trip will be recorded with half a dozen video cameras and foul language can easily end up on film. This ruins the footage for broadcast media (clean videos can sometimes translate to a substantial sum of money), promotional videos for UNC Asheville, and that great tornado footage that you want to show to your family. Foul language also proves that you cannot think of a more elegant way to express yourself. Please use clean language for the duration of this trip. Should you experience a slip of the tongue, you will happily donate $1 to the gasoline and toll fund. This fee applies for *every* instance of foul language on the trip.