METR 2603 – Severe and Unusual Weather Syllabus: Spring 2008

Instructor: Mr. Mike French

Office: NWC 5355 **Phone**: 325-1935

Office Hours: Monday 10:30 – 11:30 AM, SEC 562, or by appointment

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Section 001 MWF 9:30-10:20 AM SEC N202A

Content: Severe and Unusual Weather is a non-majors course that serves as a General Education Core II Natural Science Elective (non-lab). It is designed to provide students with an in-depth look at the physical and societal aspects of severe and unusual weather. Specific topics to be covered include thunderstorms, squall lines, hail, lightning, tornadoes, microbursts, hurricanes, observational systems and procedures, remote sensing tools, severe weather forecasting, El Nino and La Nina, severe weather climatology, blizzards and ice storms, lake-effect snow storms, and weather impacts on industry and society.

The Official Description from the OU catalog:

METR 2603-Severe and Unusual Weather: Provide non-majors and majors a detailed descriptive account of the physical processes important in the formation of various severe and unusual weather phenomena including: thunderstorms, tornadoes, hail storms, lightning, hurricanes, midlatitude snowstorms, lake effect snows, atmospheric optical effects, and global climate change.

Course Objectives: At the conclusion of this course, students should:

- Know basic properties of the atmosphere and how to interpret weather maps, charts, and symbols.
- Be able to define meteorological terms and do basic physical calculations.
- Correctly identify the meteorological phenomena listed above and understand their underlying physical processes.
- Know and be able to explain climatological distributions of severe and unusual weather phenomena.
- Be able to analyze and discuss meteorological events scientifically.
- Understand the societal impacts of severe and unusual weather.

Text: Required – "Severe and Hazardous Weather" (**2**nd **Edition**) - by Rauber, Walsh and Charlevoix. Kendall/Hunt Publishing.

Grading:

3 Exams

20% each (60% total)

1 Final (Not comprehensive) Homework Average 20% total 20% total

Total

100%

Grading Scale:

90-100	Α
80-89	В
70-79	C
60-69	D
0-59	F

Homework: Homework must be turned in by the time listed on the assigned due date. The only possible exceptions are the same as those for exams (see below). Homework that is up to 24 hours late will only receive half credit. Homework that is more than 24 hours late will receive a score of 0. Remember, you are always welcome to turn in homework early!

Exams: Exams must be taken on the scheduled date. The only exceptions to missing an exam on the scheduled date will be: (1) serious medical condition (illness or injury) of you or an immediate family member; (2) University excused absence; (3) jury duty; or (4) military orders. Only in such instances will an exam be rescheduled depending on the best interests of the student. Appropriate documentation must accompany any excused absence from an exam or quiz, and I must be notified at least 24 hours in advance.

Exams Dates:

Exam 1: Friday, Feb. 8th, 9:30 AM

Exam 2: Wednesday, March 5th, 9:30 AM Exam 3: Wednesday, April 9th, 9:30 AM

Final Exam: Tuesday, May 6th, 8-10 AM

If these dates change, you will be notified well in advance. The first three exams will be taken during class time, and all of the exams, including the final, will be taken at the same location as the lecture, SEC N202A.

Holidays: Jan 21st (Martin Luther King, Jr. Day), March 17th, 19th, and 21st (Spring Break).

Attendance: You are expected to attend every lecture, although attendance will not be taken. The material learned in one class is connected to other material learned in the class on other days, so it is to your advantage to attend every lecture.

Web Page: This course has a web page located at: https://learn.ou.edu . Class announcements and copies of other class materials (lectures, homeworks, etc.) will be posted on the website. All grades will be posted on the class website as well, and if you have any questions about what has been posted, please contact me immediately.

The textbook also has a website: http://severewx.atmos.uiuc.edu/

I will use some of the material from this website. Use this website to gain further insight into some topics. On each page there are links at the bottom that are also useful to the curious student to go beyond the material taught in this class. If you have any questions about any of the material presented, let me know by asking a question in class, during office hours or by email.

Needed Disclaimers:

"The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325-3852 or TDD only 405/325-4173."

Academic Misconduct:

"Academic integrity means understanding and respecting certain basic truths, without which no university can exist. Academic misconduct—'cheating'—is not just 'against the rules.' It violates the assumptions at the heart of all learning. It destroys the mutual trust and respect that should exist between student and professor. Finally, it is unfair to students who earn their grades honestly." - [OU Provost Web Site]

The University policy on academic integrity is far too long to reproduce here. Refer instead to the site, http://www.ou.edu/provost/integrity/. If you choose to cheat, you start an administrative process that immediately is out of my control.

From the Provost's page on academic integrity:

The "Academic Misconduct Code" describes in detail a student's rights and responsibilities as a member of the OU academic community. (Rules and procedures are somewhat different for the Health Sciences Center, the College of Law, and courses offered off-campus). The Code defines academic misconduct simply as *any* act which improperly affects the evaluation of a student's academic performance or achievement. Just as professionals are expected to know the rules of their profession, students have to know what counts as misconduct. Claiming ignorance of the rules is not a defense. So when in doubt, ask your professor!

Here are some issues that come up frequently. These are merely examples and do not limit what counts as misconduct under the Academic Misconduct Code:

CHEATING AND UNAUTHORIZED MATERIAL ON EXAMINATIONS. Tests test how well the student has learned. Therefore, unless the professor specifies otherwise, all examinations are to be completed by the student alone, without extraneous assistance of any kind. That means no help is to be given to or received from other persons during the test; no books, notes, calculators, or other materials of any kind are to be consulted; and if a calculator or other hand-held electronic device is permitted to be used for mathematical calculations, no other information may be programmed into or retrieved from the device. Whenever the professor permits an exception to any part of these rules, the exception applies only as far as specified by the professor. Such

exceptions must be expressly permitted and cannot be presumed from prior exceptions on other tests.

IMPROPER COLLABORATION. Collaboration means working together. Many classes emphasize working with a partner or in groups. Permission from the professor to "work together" on a homework, project or paper is *not* permission to violate the rules of integrity by presenting another student's work as your own. Unless the professor specifies otherwise, it is assumed that all work submitted for a grade will be the product of the student's own understanding, and thus expressed in the student's own words, calculations, computer code, etc. When a student's work is identical or very similar to someone else's at points where individual variations in expression would be expected, it is reasonable for the professor to conclude that academic misconduct has occurred.

Academic misconduct is a serious breach of ethics since it potentially can harm those students who are honestly pursuing their studies. All instances of alleged academic misconduct will be thoroughly investigated and action taken under the official university policies.

Please see Lecture 0: Course Guidelines for more specific information about this class.