Weather and Climate

ISNS 2368.001.15F Fall 2015 Fridays, 1:00pm-3:45pm SOM 2.722

Instructor

Jackie Miller

Office hours: After class or by appointment in SOM 2.722

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Textbook

Aherns, C. Donald

Meteorology Today: An Introduction to Weather, Climate, and the Environment. Tenth Edition* Workbook is optional

*The 10th edition is the most recent. If you have an older edition, the material is virtually the same. There may be a few differences with study questions but the material taught is identical. We can make it work you have an older one!

Course Description

Weather and Climate is a survey course of weather and climate for non-meteorology majors. In this class we will cover a wide variety of topics to help you gain an understanding of the science behind daily weather, climate, and climate change. This course is intended to help you gain a basic understanding of the atmosphere and how it applies to and impacts your daily lives and your future career.

Some of the main topics covered are:

- 1. Earth's atmosphere
- 2. Air temperature
- 3. Humidity and condensation
- 4. Clouds, cloud development, and precipitation
- 5. Air pressure and winds
- 6. Atmospheric circulations
- 7. Air masses, fronts, cyclones, and jet streams
- 8. Thunderstorms, tornadoes, and hurricanes
- 9. Air pollution, climate, and climate change

While there is not a formal lab as part of the course, we will be spending time in class doing handson applications of material covered. The activities are designed to enhance your understanding of lecture material. Some lab activities or in-class pop quizzes will be collected for a grade, so class attendance is a great idea!

Grading

In-class activities	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Exam 4	20%
Pop quizzes	BONUS

If you want to do well in this class, attendance is important! The final course grades will be curved if necessary (the amount of the curve will be determined at the end of the semester) and final letter grades will be based on the following system:

Α	90-100%
В	80-89%
С	70-79%
D	60-69%
F	< 60%

An unknown number of pop quizzes will occur during the course of the semester. Please do not ask me ahead of time if a pop quiz will occur during a particular class period; I won't tell you! Also, do not ask me to change the timing of a pop quiz to accommodate your coming to class late or leaving class early. Pop quizzes occur when I schedule them to occur during a class period.

The primary purpose of in-class work and quizzes is to encourage you to keep up on your reading, to attend lectures, and to test your understanding of the material. In-class work and pop quiz scores should boost your overall grade if you're willing to read the textbook and attend lectures!

Ask questions! It is my desire for you to understand the course material and open communication is important! Please do not hesitate to raise your hand and ask for clarification on topics. I will often call on students by name to share their thoughts and opinions on the material covered. The more you engage in class while you're there, the better you will understand the material, and the less time you'll have to spend studying outside of class!

Class schedule

Week 1 (August 28): Chapter 1 Week 2 (Sept 4): Chapters 2/3 Week 3 (Sept 11): Chapter 4

Week 4 (Sept 18): Test 1 (1/2/3/4) Week 5 (Sept 25): Chapters 5/6 Week 6 (Oct 2): Chapters 7/8 Week 7 (Oct 9): Test 2 (5/6/7/8)

Week 8 (Oct 16): Chapters 11/ tiny bit of 12

Week 9 (Oct 23): Chapter 13

Week 10 (Oct 30): Chapter 14

Week 11 (Nov 6): Meteorologist panel

Week 12 (Nov 13): Test 3 (11/tiny bit of 12/13/14)

Week 13 (Nov 20): Chapters 15/17

Week 14 (Nov 27): NO CLASS- THANKSGIVING BREAK

Week 15 (Dec 4): Chapter 19/Review Week 16 (Date TBD): TEST 4 (15/17/19)

Because of the nature of this course, the early lectures lay the foundation for later lectures. Therefore, the final test of the year will not be cumulative in that the test will be composed of questions from each chapter covered during the semester. However, it will be "intrinsically cumulative" since the content will require you to remember material from earlier in the year. Translation: Test 4 is just "Test 4" and not a "Final".

Absences from tests

If you will be missing an exam, please let me know by AT LEAST the class period before so that we can schedule a time for you to take the exam. I will make you aware of the exam dates on the first day of class so "not knowing" about an exam is not a valid excuse for missing! Please provide documentation to support your absence when possible.

Academic Misconduct

All students are expected to be familiar with and abide by the UTD Academic Misconduct Code. Information on this code and other student policies is located at:

http://policy.utdallas.edu/utdsp5003

Cheating will not be tolerated and will be reported. No exceptions. No excuses.

Religious Holidays:

It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required classwork that may fall on religious holidays.

Any student who has a religious holiday fall on one of the exam days, please see me no later than one week before the exam so that we can make other arrangements for you.