METR 2023-HONORS SECTION Introduction to Meteorology II

This course is a qualitative and quantitative introduction to winds, mid latitude synoptic storms (extratropical cyclone model), severe weather (severe weather scenarios), and forecasting. In addition we will study air pollution, tropical meteorology, climate, and climate change on regional and global scales. The difficulty level of the material is designed for prepared, sophomore students majoring in meteorology that are in the Honors Program at OU.

General Information

Instructor: Dr. Jerry M. Straka

Office Room: 5303 Office Phone: 325-5503

E-Mail: jstraka@ou.edu or jmstraka@cox.net

Class Room: 5820

Class time: MWF 10:00AM-10:50AM

Office hours: M from 11AM-12PM and Tu from 2PM-3PM (Tentative) Additional office hours: By appointment with 24 hr e-mail notice.

Grading Lowest of 3 regular test scores is dropped

 Laboratory:
 20%

 Homework:
 15%

 Test 1:
 15%

 Test 2:
 15%

 Test 3:
 15%

Comprehensive final: 15% Mandatory

Chapter Summaries:

Professionalism and

Participation 10%

100%

10%

 Scores
 Grades

 90-100
 A

 80-89
 B

 70-79
 C

 60-69
 D

 <59</td>
 F

Books:

Mandatory: Meteorology Today (7th Ed.) by Ahrens

Recommended: Meteorology for Scientists and Engineers (2nd Ed.) by Stull

Optional: Atmospheric Science (An Introductory Survey) by Wallace and

Hobbs (latest edition)

Mandatory Work:

Read each assigned chapter(s) in the selected book(s) and/or handout(s) listed on the weekly planner PRIOR to each lecture Section. The dates of these are indicated in the tentative reading list for the semester on the following page. You are expected to come to class well prepared to discuss what you have read and answer questions I might ask during lecture. A well-written paragraph highlighting the goals and conclusions of the chapter(s) and/or handout(s) you read will be due BEFORE the assigned section is started in class. At the bottom of each paragraph you turn in you must include two or three questions about the reading that you have done. Look on the Web to see if you can find information or questions about what we will be discussing in class. The questions you write must be original and not from the books from which the reading is assigned or other sources. Technical writing skills count toward your grade. As in the past, the goal is to expand your ability to think critically. It is the goal of this instructor for you to learn to teach yourself rather than relying on every word of the instructor.

Homework Policy:

Homework is due on the day assigned. For each day your assignment is late 20 points are dropped. All reading summaries/questions must be turned in or a negative influence on your grade will be imposed (e.g., 1 pt. for turning in a reading summary that is done well as opposed to -1 pt. for failure to turn in a reading assignment.) Sloppy, or incomplete reading assignments will get a grade of 0 pt.

Accommodations:

Any student in this course who has a disability that prevents them from fully participating and demonstrating their abilities should contact me personally, as soon as practically possible, so we can discuss accommodations necessary to ensure full participation and facilitate educational opportunities. You must be prepared to bring documentation from the office of disability services (325-3852).

Academic Misconduct:

All cases will follow the university guidelines on academic misconduct on the university web pages:

http://www.ou.edu/provost/pronew/content/integritymenu.html

Questions about the course:

If you ever have questions about the course or suggestions please notify me during office hours.

Tentative Weekly Reading Planner and Syllabus A=Ahrens (Mandatory); S=Stull (recommended)

Week 1	01/17-01/19	Introduction and Review
Week 2	01/22-01/26	Friday: Outlines of Chapter S1 due The Atmosphere in Motion, Air Pressure, Forces, and Wind Monday: Outlines of Chapter A9 (S9) due
Week 3	02/29-02/02	The Atmosphere in Motion, Air Pressure, Forces, and Wind Wind: Small-Scale and Local Systems Wednesday: Outlines of Chapter A10 (S4) due
Week 4	02/05-02/09	Wind: Small-Scale and Local Systems Monday: Outlines of (S10) due
Week 5	02/12-02/16	Monday Review for Exam Wednesday: Exam Friday: go over exam
Week 6	02/19-02/23	Wind: Global Systems
Week 7	02/26-03/26	Monday: Outlines of Chapter A11 (S11) due Air Masses and Fronts Monday: Outlines of Chapter A12 (S12) due
Week 8	03/02-03/02	Mid Latitude Cyclones Monday: Outlines of Chapter A13 (S13) due
Week 9	03/05-03/09	Weather forecasting Monday: Outlines of Chapter A14 (S14) due
Week 10	03/12-03/16	Monday Review for Exam Wednesday: Exam Friday: go over exam
Week 11	03/19-03/23	Spring Break
Week 12	03/26-03/30	Thunderstorms and Tornadoes Monday: Outlines of Chapter A15 (S15) due
Week 13	04/02-04/06	Tropical Meteorology and Hurricanes Monday: Outlines of Chapter A16 and A17 (S16) due
Week 14	04/09-04/13	Hurricanes and Air Pollution Monday: Outlines of Chapter A17 (S17) due
Week 15	04/16-04/20	Monday Review for Exam Wednesday: Exam Friday: go over exam
Week 16	04/23-04/27	Global Climate, Climate Change and Weather Modification Monday: Outlines of Chapter A18 and A19 (S18) due
Week 17	04/30-05/04	Global Climate, Climate Change and Weather Modification Friday Review For Comprehensible Final
Week 18	05/07-05/11	Comprehensive Final Exam