

SYLLABUS

ATMO 105 - Introduction to Meteorology - Fall 2007

Class #: 12337

11:00 - 12:15 PM TR

1001 MAL

Objective: For each student to gain a basic understanding of weather and climate.

Instructor: Curtis Hall

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Office Hours: 12:30 - 1:15 PM TR or by appointment.

<u>#</u>	<u>Day</u>	<u>Date</u>	<u>Topic</u>	<u>Reading Assignment</u>
1	R	8/16	Introduction: The instructor, course, etc. data, observations, charts	Preface, Chapter 1
2	T	8/21	Introduction: Earth/atmosphere, station models, charts, forecasts	Chapter 1, App. C
3	R	8/23	Introduction: Earth/atmosphere, chart analysis, isolines, gradients	Chapter 1
4	T	8/28	Energy and radiation	Chapters 2
5	R	8/30	Transfer processes, temperature distribution; radiation, day and season	Chapters 2,3
6	T	9/4	The radiation budget and transfer processes; radiation, day and season	Chapters 2,3
7	R	9/6	Water in the atmosphere, clouds	Chapter 4
8	T	9/11	Cloud and precipitation formation	Chapter 4,5
9	R	9/13	Cloud and precipitation types	Chapter 5
10	T	9/18	Air pressure, vertical motion, thermodynamic diagrams	Chapter 6
11	R	9/20	Air pressure, vertical motion	Chapter 6
12	T	9/25	Air pressure, vertical and horizontal motion	Chapter 6
13	R	9/27	Hydro static relationships, Skew-T charts	Chapter 6
14	T	10/2	Hydrostatic relationships, horizontal winds	Chapter 6
15	R	10/4	Scales of motion, local circulation patterns	Chapter 7
16	T	10/9	Synoptic and global circulation patterns	Chapter 7
	R	10/11	Fall Break.	None
17	T	10/16	Streamlines, trajectories, gradients and advection	Chapter 1,6
18	R	10/18	Midterm Test	Chapters 1 - 7
19	T	10/23	Jet streams and fronts	Chapter 8
	R	10/25	Air masses and fronts	Chapter 8
20	T	10/30	Mid-latitude cyclones	Chapter 8
21	R	11/1	Lightning, thunderstorms and tornadoes	Chapter 10
22	T	11/6	Lightning, thunderstorms and tornadoes	Chapter 10
23	R	11/8	Weather forecasting	Chapter 9
24	T	11/13	Hurricanes	Chapter 11
25	R	11/15	Air pollution and the heat island	Chapter 12
26	T	11/20	Climate/Climate Change	Chapter 13
	R	11/22	Thanksgiving Break	None
27	T	11/27	Climate/Climate Change	Chapter 13
28	R	11/29	Climate/Climate Change	Chapter 13
29	T	12/4	Review	
30	R	12/6	Test	Chapters 8 - 13
	F	12/7	Stop day	none
	R	12/10	Final Exam 10:30 AM – 1:00 PM	Chapters 1 - 13

LABS: Purchase Lab manuals at any of the three bookstores (KU, University or Jayhawk). Lab classes meet in 225 LIN. The first Monday/Wednesday labs will meet Monday, August 20 and the first Tuesday/Thursday labs will meet Tuesday, August 21.

QUIZZES: Quizzes over material from lectures and the text book will be given during most class periods. Each quiz will consist of about 10 questions.

TESTS: There will be two in-class tests and a comprehensive final. In-class tests and the final will consist of computer graded multiple choice questions.

GRADES: The standard percentages will be used to assign letter grades. Scores may be adjusted according to class performance by an amount not greater than the equivalent of one letter grade. For grading purposes, your lab score will weigh 30%, quizzes 20%, in-class tests 30%, and the final 20%. Please note: You must receive a passing grade in both lab and lecture in order to pass the course.

MISSED EXAMS AND LABS: Students who fail to attend their first lab session will be dropped from the course. During the term, if you must miss a lab or exam, present a written excuse to your instructor. You MAY then be allowed to make up the exam or lab.

TEXTS:

1. Essentials of Meteorology, Ahrens, Donald C., Fifth Edition, 2007.
2. Introductory Meteorology Laboratory Manual, 2e, 2007.

HANDICAPPED STUDENTS: The staff of Services for Students With Disabilities (SSD), 135 Strong, 785-864-2620 (v/tty), coordinates accommodations and services for KU courses. If you have a disability for which you may request accommodation in KU classes and have not contacted them, please do so as soon as possible. Please also see me privately in regard to this course.

INTELLECTUAL PROPERTY: Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. On request, the instructor will usually grant permission for students to audio tape lectures, on the condition that these audio tapes are only used as a study aid by the individual making the recording. Unless explicit permission is obtained from the instructor, recordings of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person, whether or not that individual is enrolled in the course.

CHEATING: Cheating in any manner will not be tolerated. Note that cheating includes handing in for credit work that is not your own. Any student discovered cheating will be given an F for the course and a letter explaining that the grade was given for academic misconduct will be sent to the student's school or college.

EXPECTATIONS: I expect to:

1. Guide your study.
2. Present lecture material at a rate and in a manner that allows the average student to follow and take notes.

3. Measure your understanding and provide timely feedback.
4. Treat you fairly.

I expect you to:

1. Arrive at class on time.
2. Not disturb others.
3. Clean up after yourself -- leave the classroom in good shape.
4. Prepare for each class by studying assigned material, lecture notes and materials from previous courses, as necessary. (2 - 3 hours for each hour spent in class.)
5. Mentally participate in class activities. This usually means no more than thinking about what you write down.
6. Spend some time thinking about how the material fits with what you already know and how it alters your understanding of the causes of weather and climate.
7. Tell me if you are dissatisfied with any aspect of the course.