

EARS 14 – Meteorology Spring 2014

Course Requirements and Grading:

Labs (40% of grade): There will be 7 different lab assignments during the term. You will have ~1 week to complete each report. The largest lab write-up will be based on data you acquire from a region of your interest for a larger final project, and will be weighted twice as much (10%) as other labs (5% each) to reflect the larger time commitment.

Class Quizzes (10% of grade): There will be 3 short, in-class quizzes during the term. These will be based entirely on the required reading and lectures. I will drop the lowest quiz grade.

Class Participation and Presentations (10% of grade): You will make 1 short (~10-15 min) presentation discussing the week's weather and forecast. We will also have in-class exercises through LectureTools that you should complete and will be part of this grade.

Midterm Exam (20% of grade): This will be a midterm exam **scheduled on Wednesday April 23rd during lab period (time subject to adjustment).**

Final Exam (20% of grade): The final exam covers material in the 2nd half of the course, and is **currently scheduled for Wednesday, May 21 at 3-5 pm.**

Late Lab Assignments: Lab assignments are due at 5 pm on the due date. You should turn in your assignments in the EARS 14 drop box on the second floor of Fairchild Hall. **5% will be deducted** for each day that an assignment is late, unless you discuss the situation with me **prior** to the original due date. For example, an assignment due on Wednesday would be deducted 5% if turned in between 5 pm Wednesday and 5 pm Thursday, and 10% if turned in between 5 pm Thursday and 5 pm Friday, etc. If you are unable to complete an assignment on time due to illness or other personal reasons, you may be eligible to have this penalty waived. You are encouraged to **talk to me as soon as possible**, and if necessary, meet with your Dean to discuss your situation.

Disability-Related Accommodations: Students with disabilities enrolled in this course and who may need disability-related academic adjustments and services are encouraged to see me privately as early as possible in the term. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office (301 Collis Student Center, 646-9900, student.accessibility.services@dartmouth.edu). Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to me. As a first step, if students have questions about whether they qualify to receive academic adjustments and services, they should contact the SAS office. All inquiries and discussions will remain confidential.

Religious Observances: If you have a religious observance that conflicts with your participation in this course, please meet with me to discuss accommodations.

Academic Honor Principle: You should be aware of and conform to the Dartmouth Honor Code as expressed in the ORC. For this course, this means:

Labs: You may discuss the lab assignments with each other and work together towards solutions, but you must write up your solutions **in your own words** showing your thinking and work where appropriate. If you are working in groups then you may share data with group members, but write-ups should still be in your own words.

Exams: All work on exams is your own.

Tentative Schedule (Updated 3/24/14)

Date	Lecture/Lab Topic	Reading	Assignment
3/25 (T)	Course Introduction	Ch. 1	
3/26 (W)	Lab 1: Vertical Structure/Earth-Sun Geometry		
3/27 (Th)	Atmospheric structure and heating	Ch. 2	
4/1 (T)	Solar heating and Temperature	Ch. 3	
4/2(W)	Lab 2: Global energy budget, Hanover temp		Lab 1 due
4/3 (Th)	Temperature Controls	Ch. 3	
4/8 (T)	Moisture and Atmospheric Stability	Ch. 4	Quiz #1
4/9 (W)	Lab 3: Moisture and precipitation		Lab 2 due
4/10 (Th)	Condensation and Precipitation	Ch. 5	
4/15 (T)	Winds and Pressure	Ch. 6	
4/16 (W)	Lab 4: Atmospheric motion		Lab 3 due
4/17 (Th)	Atmospheric Circulation	Ch. 7	Quiz #2
4/22 (T)	Air Masses and Fronts & Midterm review	Ch. 8	
4/23 (W)	MIDTERM EXAM covering Ch. 1-8		
4/24 (Th)	Weather patterns I	Ch. 9	Lab 4 due
4/29 (T)	Weather patterns II	Ch. 9	
4/30 (W)	Lab 5: Weather map analysis and extra-trop cyclones		
5/1 (Th)	Thunderstorms and Tornados	Ch. 10	
5/6 (T)	Tropical Storms and Hurricanes	Ch. 11	
5/7 (W)	Lab 6: Hurricanes and Tornados		Lab 5 due
5/8 (Th)	Weather Forecasting	Ch. 12	Quiz #3
5/13 (T)	Air Pollution	Ch. 13	
5/14 (W)	Lab 7a: Climate change and weather		Lab 6 due
5/15 (Th)	Earth's Changing Climates	Ch. 14 & 15	
5/20 (T)	Changing Climate	Ch. 14	
5/21 (W)	Final Exam 3-5 pm		
5/22 (Th)	Fini		