METR 4133, Atmospheric Dynamics III: Mid-Latitude Synoptic-Scale Dynamics
Fall 2014

Instructor
Dr. Xuguang Wang
Office: National Weather Center, Room 5341
Email: xuguang.wang@ou.edu
Phone: 405 325 3426
Office Hours: Tues and Thurs 12:45-1:45pm

Grader
Ms. Yaoyao Zheng (yaoyaozheng@ou.edu)

Class Web Site
http://weather.ou.edu/~xwang/METR4133-2014.html

Classroom/Time
Room 5600, National Weather Center, Tues and Thurs, 11:30 am – 12:45 pm

Required Texts


Prerequisites
METR 3123 (Atmospheric Dynamics II) and METR 3223 (Physical Meteorology II) and or equivalents. IF YOU HAVE NOT RECEIVED A GRADE OF "C" OR BETTER IN THE PREREQUISITE COURSES, YOU CANNOT ENROLL IN THIS ONE.

Tentative Topics
Review of elementary dynamics, thermodynamics
Quasi-geostrophic theory and application
Extra-tropical disturbances and baroclinic instability in the context of QG theory
Fronts, jets
Selected topics on atmospheric predictability, ensemble prediction and data assimilation

Grading
Homework Problems (4-6 sets) 25%
Mid-Term Exam (Thursday, October 16, in class) 35%
Final Exam (10:30 am-12:30 pm on Wednesday, Dec 10) 40%

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Those having such a need are requested to speak with Dr. Wang as early in the semester as possible. Students with disabilities also must be registered with the Office of Disability Services (ODS) prior to receiving accommodations in this course. You may contact the ODS at Goddard Health Center, Suite 166, phone 405-325-3852 or TTD only at 405-325-4173.

It is the student’s responsibility to read and understand the University of Oklahoma Student Code, especially that governing Academic Misconduct. Violations of the Student Code will not be tolerated in this course.