

METR 4433, Mesoscale Meteorology

Spring 2017

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| Instructor | Dr. Kelvin K. Droegemeier (kkd@ou.edu) Office: Five Partners Place, Room 3211 (325-3806) Office Hours: To be announced | |
| Room/Time | Room 5600, National Weather Center, Tues and Thurs, 11:30 am – 12:45 pm | |
| Class Web Site | http://kkd.ou.edu and see METR 4433 link | |
| Facebook Page | http://facebook.com/groups/OUMETR4433 | |
| Grader | Ms. Larissa Reames (lreames@ou.edu) Office: National Weather Center, Room 5104 Office Hours: To be announced | |
| Required Text | Markowski, P. and Y. Richardson: <i>Mesoscale Meteorology in Midlatitudes</i> . Wiley-Blackwell, 430pp. | |
| Supplemental | Holton, J.R., 1992: <i>An Introduction to Dynamic Meteorology</i> , 4 th Edition, Academic Press, 535pp. Trapp, R.J., 2013: <i>Mesoscale-Convective Processes in the Atmosphere</i> . Cambridge University Press, 346pp. | |
| Prerequisites | METR 4133 (Dynamics III) and METR 4424 (Synoptic Laboratory) or their equivalents. IF YOU HAVE NOT RECEIVED A GRADE OF “C” OR BETTER IN THESE PREREQUISITES YOU CANNOT ENROLL. | |
| Content | This course is designed to acquaint the student with the application of atmospheric dynamics and physical analysis techniques to mesoscale phenomena. Topics include definition of the term “mesoscale,” radar principles and interpretation, drylines, deep convective storms, tornadoes, mesoscale convective systems, mesoscale cellular convection, horizontal convective rolls, land/sea breezes, mountain waves and hurricanes. | |
| Grading | Homework Problems | 25% |
| | Weekly Quizzes | 10% |
| | 2 Hour Exams (Thursday, Feb 16 and Thursday, Mar 30) | 30% |
| | Comprehensive Final Exam (Wednesday, May 10, 10:30 am) | 35% |

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. Droegemeier 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.