

SYLLABUS

METR 4911

Fall 2012

Senior Seminar -- CAPSTONE

Time and Place: Wednesday, 4:00 – 4:50 pm, Room 5930, National Weather Center

Instructor: Dr. David Parsons
Room 5919 NWC
Phone 325-8565
Email: dparsons@ou.edu
Office hours: After class: Weds 4:50 – 6:00 pm
or by appointment through Marcia Pallutto
(Marcia@ou.edu)

Prerequisite: Grade of C or better in Meteorology 3123, 3223

Teaching Assistant: None, although I will use a grader for some assignments

Text: None

Class description: With METR 4922, this course satisfies the Capstone course graduation requirement. The instructor will guide senior meteorology majors through planning of a research project that leads to a new understanding of a topic in the atmospheric sciences. In defining projects, the atmospheric sciences will be defined in a broad sense to cover a broad range of research and development activities. Interdisciplinary topics are also encouraged. Library work will be required as projects should be rooted in the scientific literature to show that the students have made a unique contribution to the field. Students will be paired with regular or adjunct faculty mentors. Other qualified individuals may serve as mentors with permission from the instructor. The main accomplishment of 4911 will be a mini-proposal, which will serve as a guide for the senior research project in METR 4922. Note that METR 4922 should be taken following this course.

Instructor Philosophy: This course moves students from studying meteorology to doing meteorological research based to a large extent on their own interest. The course is intended to be flexible so that research projects can be relevant to student's long-term career plans ranging from employment in the private sector, government agencies, research centers or academic careers. Regardless of the career path, however, meteorologists often do development and research at some point in their career. The expectation for the student is to develop an in-depth

understanding of the research process and a feeling for the research culture in meteorology and the related sciences.

Format: The students will also be expected to write a letter-of-intent outlining their proposal followed by a proposal. The proposal will generally guide their spring research project in METR 4922. If the research takes place as a team effort, the contribution of each team member is to be specifically defined. Short weekly assignments will be based on the guest lectures or the Seminar Series as a means of illustrating specific points related to research and presentation techniques.

The goal of participating in the research culture at the School will be accomplished through guest lectures on a variety of research topics in meteorology and through attendance, if your schedule permits, at the National Weather Center Seminar Series (Tuesday 3:30 to 4:30 pm). Outside speakers will make presentations on current research topics in their research disciplines or professional activities. Past speakers have included faculty, forecasters and private sector meteorologists reflecting the broad research and development needs of our fields. The instructor may present professional skills useful during job search, early employment, and/or graduate school. The guest lectures will take up the first portion of the course followed by either a short lecture by the instructor or research teams meeting with the instructor to help define their research project and approach.

Grades and assignments:

The grading policy will be based on:

Final Research proposal:	50% of the grade
Letter of Intent:	15% of the grade
Other class assignments:	20% of the grade
Participation:	15% of the grade

Standard grading will be used (A: 90-100%, B: 80-90%, C: 70-80%, D: 60-70%, F: < 60%). Research proposals may be resubmitted for a "re-grade" if necessary. There will be no final exam in this course.

All assignments need to be submitted through D2L. Students need to obtain permission in advance for assignments submitted after the due date. Contact the instructor by email and/or phone to seek permission. Late assignments submitted without prior notification of the instructor may be marked down at the instructor's discretion at a rate not to exceed 4% per day. Exceptions will be made for emergencies, religious holidays and other instances consistent with OU policy, and, if possible, the student should contact the instructor in advance.

Important dates:

Letter of Intent (Title, Team Members, Mentor and Abstract): 10 Oct @ 6 pm

Last Date for Draft Proposals Submitted for Possible Regrade: 26 Nov @ 6 pm

Final Proposal: 9 Dec at 6 pm

Additional, assignments will sometimes be accomplished during class time and may be linked to the topic of the invited speaker and, thus, assigned without advance warning.

Web site:

This class will be using the Desire2Learn course management software, located at **<http://learn.ou.edu>**, which is a system designed to facilitate interaction between instructors and students. Announcements, lectures and other related information will be posted here, so we ask you to become familiar with its use.

Materials will be placed on D2L to guide the assignments including examples of past proposals.

Other Comments:

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325-3852 or fax only 405/325-4173.

All students are expected to be familiar with and abide by the OU Academic Misconduct Code. Information on this code and other student policies is located at <http://studentconduct.ou.edu>.