

Earth Space and Atmospheric Sciences 2117

Advanced Weather Analysis and Forecasting II

Professor Paul L. Sirvatka
College of DuPage
Spring 2012

Description: A continuation of Advanced Weather Analysis and Forecasting I. Students prepare a weekly forecast for the Chicago metropolitan area generally and DuPage County specifically, and track and evaluate their forecasting accuracy. Taking advantage of a fully-operational weather laboratory, students monitor current weather conditions locally and across the nation.

Prerequisite: Earth Science 2116

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Office Hours: M 1:00 - 3:00PM; W 2:00 - 3:00PM; F 9:00 - 10:00AM; 2:00 - 3:00PM
TuTh 2:00-4:00PM
I will also be available at other times. Please try to set up an appointment if you wish to see me at any time. Please feel free to contact me with questions using email as well.

Text: Weather Forecasting Handbook, Tim Vasquez. (You may order on-line at <http://www.weathergraphics.com/>)

Additional Materials: Good colored pencils (at least red, blue, yellow and green) are required *daily*.

Attendance: Attendance is mandatory and a significant part of your grade. Each student is allowed only one absence during the term without penalty. Absences beyond the one excused will result in a 4-point deduction. Late attendance may also be penalized.

Grading:	Class participation	10 points
	Class and lab attendance	20 points
	Quizzes and assignments	20 points
	Forecasts	50 points

Grades will be straight scale. Your grade will be based upon attendance and participation, and successful completion all assignments and forecasts. All work must be completed. An incomplete will be given only in an exceptional circumstance. It is the student's responsibility to withdraw from the course due to non-attendance. Failure to withdraw will result in an "F". Late assignments will be penalized to a maximum credit of 50% at the discretion of the instructor. Students wishing to take this course on a pass/fail basis must earn a

grade of a "C" or higher to receive a "Satisfactory" for the course. In order to fulfill the general education requirements a letter grade must be received.

Course Objectives: Upon successful completion of this course the student should be able to do the following:

1. Demonstrate familiarity with the College of DuPage NEXLAB web site
2. Diagnose the current conditions of the atmosphere
3. Integrate accurate diagnosis with numerical model forecasts
4. Analyze numerical models and synthesize a five day forecast and weather summary
5. Present weather briefings
6. Construct formal public and area forecast discussions for DuPage County

Expectations: The student is expected to attend all classes, participate fully in classroom discussions and cooperate in learning experiences with other classmates. The class will meet twice weekly for lecture and weather discussion. Additional participation on a mail-list is also expected. Failure to participate will result in a lowering of your grade. Students will also be expected to spend an additional hour weekly in the weather lab, forecasting, working on exercises, or monitoring significant weather. 3 forecasts must be prepared and written for WDCB radio. These forecasts must be completed throughout the whole semester, approximately one every three weeks. You must log these additional 10 hours on the lab computer. Incorrect logging will reduce your time to 15 minutes. A 3-point deduction will be taken for every hour not in the lab and a 2-point deduction will be taken for each missed forecast. A total of 2 hours may be spent reviewing audio-visual materials available in the prep room while another 2 may be spent reviewing literature from the reading library concerning some aspect of meteorology. Each review must be accompanied by a half-page essay explaining what was learned.

Culminating Activity: A final activity will be given during Finals Week. See <http://www.cod.edu/schedule/> for a listing of the final schedule.

Class Reading: Read the pages as listed below and write or type an outline of those pages. Include full sentences and all pertinent information. This assignment will be due completely after the fourth full week of class. (Due Date - February 6, 2012.)

Weather Forecasting Handbook Chapters 6, 7, 8, 9, 10, 12.

Discussion Board: All students are expected to participate in the College of DuPage Meteorology Discussion Board known as COD Forecast. Go to <http://weather.cod.edu/codfcst> to sign up. Participation (or lack thereof) on this list will affect your participation grade.

Advising: Please feel free to speak to me concerning school plans and classes to take, whether or not you are involved in meteorology as a major. I will be more than happy to discuss anything related to school or anything else in your life that might be a problem or obstacle to your success.