

# Earth Space and Atmospheric Sciences 1116

## Weather Analysis and Forecasting I

Professor Paul L. Sirvatka  
College of DuPage  
Fall 2012

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**Description:** A study of day-to-day weather patterns with an emphasis on understanding the basics of meteorological processes and forecasting. Students read weather reports and weather maps needed to analyze current conditions and forecast weather. Taking advantage of a fully-operational weather laboratory, students monitor current weather conditions locally and across the nation.

**Prerequisite:** None

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Homepage: <http://weather.cod.edu/>

**Office Hours:** MW 2:00-5:00PM; TuTh 1:00-2:00PM; F 9:00-10:00AM; 2:00-3:00PM  
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 Map Handbook, Tim Vasquez. (You may order on-line at <http://www.weathergraphics.com/>)

**Additional Materials:** #2 pencils for test and 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 will also be penalized with a 2-point deduction.

**Grading:**

Class participation	20 points
Class attendance	30 points
Forecast contest	20 points
Quizzes and assignments	30 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. This must be done by November 11. Failure to withdraw by that date 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. Interpret visible, infrared, and water vapor satellite images
3. Decode standard surface and upper air maps
4. Interpret forecast discussions from the National Weather Service
5. Decode meteorological airways code
6. Identify numerical models used in weather prediction
7. Recognize significant weather features
8. Describe products available for weather analysis
9. Appraise a current weather situation
10. Summarize a weather forecast

**Expectations:** The student is expected to attend all classes, participate fully in classroom discussions and cooperate in learning experiences with other classmates. Additional participation on a mail-list is also expected. Failure to participate will result in a lowering of your grade. The class will meet twice weekly for lecture and weather discussion. Students will also be expected to participate in the National Forecasting Challenge ([www.wxchallenge.com](http://www.wxchallenge.com)) from September 24–December 6. A student is required to submit four forecasts per week during that time (M–Th). Each

missed forecast is a 1-point deduction. More details will be given later in the term.

***Culminating Activity:*** A final activity will be given during Finals Week. Check MyAccess at <https://myaccess.cod.edu/> 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 on September 18, 2012.

Weather Map Handbook pp. 1 – 21; 34 – 51; 78 – 88; 101 – 105; 130 – 139; 145 – 147.

***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.