Syllabus for Geography 301 - Meteorology

Time: 10:30 - 11:30 am, MWF
Place: Mines 306

Instructor

Von P. Walden, Associate Professor of Geography
McClure 305B
208-885-5058
vonw@uidaho.edu (preferred method of contact is by email!)

Office Hours:
Monday, Wednesday 12:30 - 1:30 pm

Course Goals

• Understand basic meteorological principles through scientific inquiry.
• Understand local, regional, and global weather patterns.
• Interpret routine meteorological data.
• Interpret detailed weather forecasts for the Pacific Northwest region.
• Build critical thinking skills.
• Appreciate the beauty and the power of the atmosphere.

Textbook (available as used book through amazon.com or at UI bookstore)

Title: Meteorology Today
Author: C. Donald Ahrens
Publisher: Brooks/Cole Thomson Learning
ISBN: 0495011622
Type: Required resource
Course Outline

(Tentative Schedule)

Part I: Intro to the Earth’s Atmosphere
  Chapter 1: The Earth and its Atmosphere
  Chapter 2: Energy: Warming the Earth and the Atmosphere
  Chapter 3: Seasonal and Daily Temperatures

EXAM #1 (in week 5*)

Part II: Atmospheric Moisture and Clouds
  Chapter 4: Atmospheric Moisture
  Chapter 5: Condensation: Dew, Fog, and Clouds
  Chapter 6: Stability and Cloud Development
  Chapter 7: Precipitation

EXAM #2 (in week 9*)

Part III: Motion in the Atmosphere
  Chapter 8: Air pressure and Winds
  Chapter 9: Wind: Small-scale and Local Systems
    Chapter 10: Wind: Global Systems (if time)
  Chapter 11: Air Masses and Fronts

EXAM #3 (in week 13*)

Part IV: Forecasting and Storms
  Chapter 12: Mid-Latitude Cyclones
  Chapter 13: Weather Forecasting
    Chapter 14: Thunderstorms and Tornadoes (if time)
    Chapter 15: Hurricanes (if time)
    Chapter 18: Air Pollution (if time)

FINAL EXAM from 10 am to Noon on Tuesday, 14 December 2010

Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>45%</td>
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<tr>
<td>Three hourly exams</td>
<td>30%</td>
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<tr>
<td>(each hourly exam is worth 10%)</td>
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<tr>
<td>Final (comprehensive)</td>
<td>25%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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Course Policies:

Students are expected to attend all lectures. Lecture time will focus on discussion of the readings from the textbook, as well as other sources, and in-class demonstrations.

Electronic Equipment

Please note that I DO NOT ALLOW ELECTRONIC EQUIPMENT to be used during my lectures. This includes laptops, cell phones, PDAs, etc... Lectures notes should be downloaded prior to the lectures from Blackboard ([http://www.blackboard.uidaho.edu](http://www.blackboard.uidaho.edu)) and reviewed. Many students find it helpful to print the notes out and bring them to class to follow along.

Student Conduct

Cheating will not be tolerated!! Your work must be your own. Do not copy or plagiarize the work of others. If you are caught cheating, you will receive no credit for that work, whether it is a homework assignment or an exam. Depending on the seriousness of the offense, you could be expelled from the university. Is cheating worth that risk? This course encourages working together, but you must do your own work. The University of Idaho's policy on cheating is described in Article II of the UI Student Handbook.

Additional information

Disability Support Services Reasonable Accommodations Statement:
Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course. Disability Support services can be contacted at 885-6307 or by email at dss@uidaho.edu. The DSS website is located at [http://www.access.uidaho.edu](http://www.access.uidaho.edu).

Weather Analysis and Forecasting (GEOG 404/504)

Dr. John Abatzoglou and I will be leading a one-credit, pass/no pass weather analysis and forecasting course that meets 1/wk W 3:30-4:20. The gist of the course is application of meteorological processes to real-time weather situations that will hopefully make life interesting during fall semester. We'll be learning the tools and tricks of weather analysis and forecasting, have a little friendly forecasting competition, and take turns presenting weekly weather briefings to the class. Additional details and a syllabus can be found at [http://webpages.uidaho.edu/jabatzoglou/waf.html](http://webpages.uidaho.edu/jabatzoglou/waf.html).