REQUIRED & OPTIONAL MATERIALS:

Text: Understanding Weather and Climate, by Aguado & Burt (Optional)
HW: Investigations in Atmospheric Science, by Mandia & Smiley (Required)
Other: Clipboard, calculator, highlighters & colored pencils (Required)

COURSE OBJECTIVES:

This is a lab science course that deals with the physics of the atmosphere and how these physical fundamentals apply to the meteorological phenomena discussed in class. Upon completing this course, you will be able to:

- Navigate the Internet World-Wide Web (WWW) for research purposes and laboratory assignments.
- Find locations using latitude and longitude coordinates.
- Determine and analyze atmospheric temperature, pressure, density, and wind.
- Describe various cloud and fog types and their formation and the associated precipitation types.
- Analyze data on a weather map, including location of air masses and weather fronts.
- Describe the dynamics of thunderstorms, tornadoes, and hurricanes, and demonstrate the ability to forecast these phenomena.
- Given real-time data, provide a three-day forecast for any city in the United States.

EVALUATION OF STUDENT PERFORMANCE:

- **LECTURE PORTION**: 7 Quizzes: 15%, Mid-term Exam: 20%, Cumulative Final Exam: 30%
- **LAB PORTION**: Group Forecasts: 15%, Forecast Exam: 20%

- Quizzes will be short answer and will normally consist of 7-10 questions. **Quizzes will be graded for content, spelling, and grammar.** Time to complete: 30 MINUTES. **The lowest quiz score will not be counted.** A missed quiz will be considered a zero.
- Mid-term exam will be 25 multiple choice questions. Students must have a scantron test form.
- Final exam will be 50 multiple choice questions. Students must have a scantron test form. **Note:** If you score a 70 or higher on the final exam, your 2nd lowest quiz score will be replaced by your highest quiz score.
- Forecasts will be done weekly. **You are allowed to miss one forecast.** Your "lowest" forecast grade will not be counted. A missed forecast will be considered a zero.

*** There is NO GRADE CURVE. There are NO MAKE-UP TESTS. ***
You may officially withdraw from this course NO LATER than THU JUN 18. No W will be granted after this date without a well-documented emergency. Any student whose name appears on the final grade roster will receive a grade.

The *Investigations in Atmospheric Sciences* modules are homework assignments that will help your understanding of concepts and material developed in class. The solutions will be posted on my home page, and should be reviewed after you have completed the assignment. Any additional questions you may have regarding the material should be asked in class or posted to the bulletin board (blog) at the course Website. **To successfully complete this course, you MUST regularly devote time to the homework assignments including the review of the online solutions.**
OFFICIAL RULES AND POLICIES:

- The College defines excessive absence or lateness as more than the equivalent of one week of class meetings during the normal semester. Excessive absence may result in a "W" for the course.
- Do NOT schedule ANY appointments during normal class times unless it is health-related.
- An absence is excused only if I consider it to be an emergency.
- While in lab, discussions will be focused on task at hand and not on "social activities."
- Cheating of ANY sort will result in a zero on that assignment and possibly an "F" for the course.
- A calculator is the ONLY device allowed during quizzes and exams. **A student caught with ANY other device (cell phone, PDA, computer, etc.) is assumed to be cheating.** Please put all devices away before quizzes and exams!
- If I determine your behavior to be disruptive, you will be excused from class. Phones, text messaging, beepers, popping gum, talking, etc., are all considered disruptive. **The result will be an unexcused absence and no materials will be accepted for that day.**
- **NEVER TEXT MESSAGE WHILE IN CLASS – YOU CANNOT LEARN IF YOU ARE NOT PAYING ATTENTION.** I will give you one warning before asking you to leave the class.

SCHEDULE OF COURSE WORK:

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<thead>
<tr>
<th>TOPIC</th>
<th>HOMEWORK:</th>
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<tbody>
<tr>
<td>Latitude &amp; Longitude Quiz</td>
<td>IAS #5</td>
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<tr>
<td>Temperature Quiz</td>
<td>IAS #3</td>
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<tr>
<td>Pressure &amp; Density Quiz</td>
<td>IAS #4</td>
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<tr>
<td>MID-TERM</td>
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<tr>
<td>Global Circulation Quiz</td>
<td>IAS #10</td>
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<tr>
<td>Clouds/Fog/Precipitation Quiz</td>
<td>IAS #9</td>
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<tr>
<td>Air Masses/Fronts Quiz</td>
<td>IAS #11</td>
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<td>Thunderstorms &amp; Severe Weather Quiz</td>
<td>IAS #7</td>
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<tr>
<td>FINAL EXAM</td>
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<td><strong>One Pop Quiz will be administered</strong></td>
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If you miss a class, it is YOUR responsibility to ask me for any materials missed. If your absence is unexcused you will NOT be able to make up a quiz, lab, or test!