OXFORD COLLEGE

Geosciences 115 - Meteorology and Climatology

Spring 2001

Course Announcements

Instructor:

Dr. Stephen W. Henderson

Office:

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Goals for the course: Meteorology and Climatology will give students an understanding of scientific investigation as it relates to our atmosphere. Students will also gain an appreciation of the processes that create weather and how biomes relate to climates. These are concepts that they can use outside of the classroom.

Text: Lutgens and Tarbuck, 1998, The Atmosphere, 8th edition

Lab Manual: Paul, 1996, Exercises in Meteorology, 2nd edition

Organization: The class will meet for lecture 3 times each week:

Monday, Wednesday, and Friday at 9:00 a.m. Laboratory will meet from 2:00-5:00 on Tuesday.

Attendance:

All students are expected to attend all scheduled lecture and laboratory sessions. Attendance will be taken. No unexcused cuts are allowed in lab. Lab quizzes cannot be made up without a valid excuse. Students who have an absence in lab will have their final grade reduced 3 points per absence. A student who has four or fewer lecture cuts for the entire semester will receive the addition of two points to the final course average. There are no excused absences. Students having six or more lecture absences will have their final course grade reduced one point per absence starting with the sixth absence.

Honor Code: The Oxford College Honor Code applies to this course. If unsure whether or not how a particular assignment falls under the Honor Code, ask the professor prior to doing the assignment.

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| Grading System: | Geography 141 will of grades is as follow | use the j | plus-minus grading system. | The distribution |
|-----------------|---|-----------|----------------------------|------------------|
| A | 93-100 | C+ | 77-79 | |
| A- | 90-92 | С | 73-76 | |
| B+ | 87-89 | C- | 70-72 | |
| В | 83-86 | D+ | 67-69 | |
| В- | 80-82 | D | 60-66 | |
| | | E | 50 and below | |

Evaluation:

Lecture work will comprise 55% of your final average. Lab will comprise the other 45%. It is broken down as follows:

| Lecture quizzes (best 2 of 3) | 15% |
|-------------------------------|-----|
| Lecture Test #1 on 2/14 | 10% |
| Lecture Test #2 on 3/28 | 15% |
| Final Exam on 5/8 @ 9:00 a.m. | 15% |
| Lab Quizzes (best 5 of 6) | 15% |
| Lab Test on 2/27 in Lab | 15% |
| Lab Test on 4/30 in Lab | 15% |

Tentative Lecture Schedule and Reading Assignments:

| <u>Day</u> | Topic for the Week | Text Assignment for the Week | <u>Lecture</u> <u>Quiz</u> |
|----------------------------|------------------------------------|------------------------------|----------------------------|
| W 1/17 F 1/19 | Introduction to the Atmosphere | Chapter 1 | |
| M 1/22 W 1/24 F 1/26 | The Atmosphere and Heat | Chapter 1 & 2 | |
| M 1/29 W 1/31 | Heat and Temperature | Chapters 2 & 3 | |
| F 2/2 | Atmospheric Optics | Chapter 16 | Yes |
| M 2/5 W 2/7 | | | |
| F 2/9 | Moisture and Atmospheric Stability | Chapter 4 | |
| M 2/12 W 2/14 | Lecture Test #1 | Chapter 4 | |
| F 2/16 | Condensation and Precipitation | Chapter 5 | |

| M 2/19 W 2/21 F 2/23 | Air Pressure and Winds | Chapter 6 | |
|----------------------------|---|--------------|-----|
| M 2/26 W 2/28 | | | |
| F 3/2 | Atmospheric Circulation | Chapter 7 | |
| M 3/5 W 3/7 | | Chapter 7 | Yes |
| SPRING BREAK | SPRING BREAK SPRING BREAK | SPRING BREAK | |
| M 3/19 W 3/21 | Air Masses | Chapter 8 | |
| F 3/23 | Weather Patterns | Chapter 9 | |
| M 3/26 W 3/28 F 3/30 | Lecture Test #2 Thunderstorms and Tornadoes | Chapter 10 | |
| M 4/2 W 4/4 | Hurricanes | Chapter 11 | |
| M 4/9 | | | |
| W 4/11 F 4/13 | Global Climate | Chapter 15 | |
| M 4/16 W 4/18 F 4/20 | Global Climate | Chapter 15 | Yes |
| M 4/23 W 4/25 F 4/27 | Global Climate | Chapter 15 | |
| M 4/30 | Global Climate | Chapter 15 | |

Laboratory Schedule for Geosciences 115:

| Lab Day | <u>Ex.</u> # | Title of Exercise Quiz at Beginning | of Lab? |
|---------|--------------|---------------------------------------|---------|
| 1/23 | 1 | Introduction | No |
| 1/30 | 3 | Earth-Sun Relationships | Yes |
| 2/6 | 5 | Temperature | No |
| 2/13 | 6 | Air Pressure | Yes |
| 2/20 | 7 | Wind and the Global Circulation | Yes |
| 2/27 | | LAB TEST # 1 | |
| 3/6 | 10 | Air Masses, Fronts, and Severe Storms | Yes |
| 3/20 | 11 | The Weather Map | Yes |
| 3/27 | 12 | Weather Analysis | No |
| 4/3 | | Weather at Oxford, Georgia | No |
| 4/10 | 13 | Climate | Yes |
| 4/24 | | LAB TEST #2 | |