PHYS/GEOS 220  Contemporary Issues in Meteorology  Spring 2016

Instructor
Name: Jian Du-Caines
Office: 202 Natural Science Bldg, (502) 852-0919
Office hours: Tues, Thurs 2:15pm-3:15pm or other time by appointment
Email: jian.du@louisville.edu

Time and Place
1:00-2:15pm  Tues and Thurs (in-class lecture, Davidson Room 109)

Text

Prerequisites
None

Objectives
1. Gain an understanding of the dynamics of Earth’s global atmosphere, how it interacts with the planet’s surface, and how it impacts human existence.
2. Learn about environmental issues related to terrestrial meteorology.
3. Understand the mechanics of storms and their life cycles.
4. See how weather conditions are observed and measured.
5. Learn how forecasts are made.
6. Read Chapters 1-13 and Chapter 15 of the text.

Course objectives will be met by attending lectures, reading the textbook, working homework assignments, asking questions in class, and taking exams.

General Education
This course satisfies the General Education Natural Science requirement, with an emphasis on practicing and developing critical thinking skills. Key elements will be modeled in class and practiced in homework, and include identifying the physical question, analyzing data, integrating mathematical and physical relationships, and drawing conclusions about the evolution of meteorological phenomena.

Grading Scheme
Weighting: 5*4% homework, 5*15% exams, 5% class attendance (you are required to sign the attendance sheet)

Exams are closed-booked, non-cumulative and taken during class (multiple choice questions answered on scantron). Homework (multiple choice questions) is due at the beginning of the class as scheduled below. No late homework will be accepted. Final course grades will be assigned based on the following scale:

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<th>Grade</th>
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<td>A+</td>
<td>100-98</td>
<td>C</td>
<td>75-69</td>
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<td>A</td>
<td>97-93</td>
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<td>A'</td>
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Tentative Class schedule:

Lecture 1 (01/07) to Lecture 5 (01/21): Chapter 1 to Chapter 3
Homework #1 post online on 01/12 (Tuesday)
Homework #1 due on 01/19 (Tuesday)
Exam #1 on 01/26 (Tuesday)

Last day to drop/add: 01/12

Lecture 6 (01/28) to Lecture 10 (02/11): Chapter 4 to Chapter 6
Homework #2 post online on 02/02 (Tuesday)
Homework #2 due on 02/09 (Tuesday)
Exam #2 on 02/16 (Tuesday)

Lecture 11 (02/18) to Lecture 15 (03/03): Chapter 7 to Chapter 9
Homework #3 post online on 02/23 (Tuesday)
Homework #3 due on 03/01 (Tuesday)
Exam #3 on 03/08 (Tuesday)

Last day to withdraw: 03/07

Spring break 03/14-03/20  no classes  (Have a nice break!)

Lecture 16 (03/10) to Lecture 20 (03/31): Chapter 10 to Chapter 12
Homework #4 post online on 03/22 (Tuesday)
Homework #4 due on 03/29 (Tuesday)
Exam #4 on 04/05 (Tuesday)

Lecture 21 (03/31) to Lecture 25: Chapter 13 and Chapter 15
Homework #5 post online on 04/12
Homework #5 due on 04/19 (Tuesday)
Exam #5 on 04/19 (Tuesday)
Extra credit due by 5 pm on 04/20 (Last day of Class; hardcopy only)

Final exams: 04/22- 04/28: No Final Exam

Extra Credit Report (10%)

One extra credit report, hardcopy only (email not accepted), may be submitted to the Instructor (Du-Caines) by 5pm on day of the last lecture. Extra credit of 0% to 10% will be added to the course total grade, depending on the quality of the report. After each chapter in your textbook, there are ‘critical thinking’ questions; you will choose one of the questions from each chapter (from Chapter 1 to Chapter 13 and Chapter 15) to answer, total of 14 questions, in the following order:

Last name A-B: Question 1 of each chapter
C-D: Question 2
E-G: Question 3
H-K: Question 4
L-M: Question 5
N-O: Question 6
P-Q: Question 7
R-S: Question 8
T-U: Question 9
A note on Academic Integrity and Plagiarism

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at the University of Wyoming, and all students are expected to act in accordance with this principle. Consistent with this expectation, all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

Academic integrity includes a commitment not to engage in or tolerate acts of plagiarism, falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the academic community and compromise the worth of work completed by others.

Evidence of plagiarism may result in expulsion from the course (with an F grade) as well as dismissal or suspension from the University of Louisville.

Students with disabilities

If you have a physical, learning, or psychological disability and require accommodations, please let the instructor know as soon as possible or contact the UofL Disabilities Resource Center directly.

Title IX/Clery Act Notification

Sexual misconduct (sexual harassment, sexual assault, and sexual/dating/domestic violence) and sex discrimination are violations of University policies. Anyone experiencing sexual misconduct and/or sex discrimination has the right to obtain confidential support from the PEACC Program 852-2663, Counseling Center 852-6585 and Campus Health Services 852-6479.

Reporting your experience or incident to any other University employee (including, but not limited to, professors and instructors) is an official, non-confidential report to the University. To file an official report, please contact the Dean of Student’s Office 852-5787 and/or the University of Louisville Police Department 852-6111. For more information regarding your rights as a victim of sexual misconduct, see the Sexual Misconduct Resource Guide (http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure).

The instructor reserves the right to make changes in the syllabus when necessary to meet learning objectives, to compensate for missed classes, or for similar reasons.