

Instructor: Dr. Dorian J. Burnette
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Office Hours
10-11 a.m. Mon-Wed
and by appointment

I encourage you to talk to me individually whenever you need to discuss your progress in the course or whenever you have a topic of special interest you want to discuss individually.

COURSE WEBSITE

elearn.memphis.edu (eCourseware)

COURSE TEXTBOOK

Climatology, 4th Edition, by Rohli and Vega

The textbook will be supplemented with free modules from MetEd (www.meted.ucar.edu).

ABOUT THE COURSE

The first two parts of the course cover climatological processes, statistical and applied climatology, and the classification of climates around the world. The last part of the course covers climate modeling, climates of the past, climate variability and change, and projected changes in the future. Prerequisites: ESCI 1010 (Weather and Climate) and MATH 1710 (College Algebra).

GRADES

Your grade at the end of the semester is completely determined from the total number of points earned. These points come from 1) three exams and 2) six exercises. Final grades will be determined from a total of 420 points:

| Grade | Points Needed | Average Percentage |
|--------------|----------------------|---------------------------|
| A | 378 | 90% |
| B | 336 | 80% |
| C | 294 | 70% |
| D | 252 | 60% |

Exams:

This course has been broken up into three sections, and an exam is scheduled at the completion of each section. Each exam is worth 100 points, and will take the format of fill-in-the-blank, problem solving, and discussion questions. While each chapter builds on previous chapters, exams only cover the new material presented. In other words, material on Exam 1 will not show up on Exam 2 or 3.

Exams can be made up, but you must have a legitimate, verifiable, and an unavoidable reason. If you know you are going to be absent, then please make arrangements for a makeup

before the exam. If you miss an exam because of an unforeseen emergency, arrangements to make it up must be made as soon as you return to campus. Please note that while makeup exams will be in the same format and cover the same material, they may not ask the same questions. The last day to makeup an exam is Study Day, 7 December 2017.

Exercises:

There will be six exercises worth 20 points each, and are due at the beginning of class on the date listed. You may work on these exercises in groups if you wish, but each student must turn in their own set of answers.

It is better to hand in exercises late than not at all. Any exercises turned in late, however, are subject to a grade penalty. The later an exercise is, the more stiff the penalty. For each class period that an exercise is late, 10% of the maximum points will be subtracted. Please note, the last day to turn in late exercises is Study Day, 7 December 2017.

Attendance:

I will not call roll. I am assuming that you can make your own decisions about class attendance and how it might influence your performance. However, it is in your own best interest to attend class for a couple of reasons. First, this is a 4000/6000-level course and class lectures will likely go beyond the textbook at times to include new material from the peer-reviewed literature, especially later in the semester. Second, I will memorize your names and faces and will know who comes to class regularly. I may use such information to give the benefit of doubt to borderline grade situations. My experience has shown students who miss a number of days, do not perform as well on exams as they could have had they attended class.

STUDENT CONDUCT

Academic Dishonesty:

Cheating, plagiarism, or any other form of academic dishonesty will not be tolerated. Cases of academic dishonesty will be dealt with in accordance with the policies set forth in the University's Code of Student Rights and Responsibilities available at <http://www.memphis.edu/studentconduct/pdfs/csrr.pdf>. It is your responsibility to understand these policies. A lack of understanding is not an adequate defense against a charge of academic dishonesty.

Cell Phones, Laptops, Tablets:

The use of cell phones, laptops, or tablet computers for purposes other than note taking is not allowed during class. Flagrant violation of this policy will result in you being dismissed from class.

STUDENTS WITH DISABILITIES

Any student who may need class or test accommodation based on the impact of a disability will need to contact Student Disability Services (SDS) at 110 Wilder Tower, 678-2880. SDS coordinates accommodations for students with documented disabilities. Once you receive your documentation from SDS, you are encouraged to schedule a meeting with me to provide me with the paperwork and discuss any accommodations needed for examinations and class materials.

COURSE SCHEDULE

Note: There is always a chance that this schedule could change. Any changes will be announced in class and updated in this syllabus on the course website.

| Date | Topic | Chapter |
|-------------------------------|--|----------------|
| 28 August | Introduction to Climatology | 1 |
| 30 August | Atmospheric Structure and Composition | 2 |
| 4 September | No Class – Labor Day | |
| 6 September | Climate System Controls | 3 |
| 11 September | Climate System Controls | 3 |
| 13 September | Atmosphere and the Earth System | 4 |
| 18 September | Atmosphere and the Earth System | 4 |
| 20 September | Energy, Matter, and Momentum Exchanges | 5 |
| 25 September | Energy, Matter, and Momentum Exchanges | 5 |
| 27 September | Hydrologic Cycle and Surface Water Balance | 6 |
| 2 October | Hydrologic Cycle and Surface Water Balance | 6 |
| 4 October | Atmospheric Circulation | 7 |
| 9 October | Exam 1 | |
| 11 October | Introduction to Statistical Climatology | Lecture |
| 16 October | No Class – Fall Break | |
| 18 October | Teleconnections and Applied Climatology | 13 / 14 |
| 23 October | Climate Classification | 8 |
| 25 October | Climate Classification | 8 |
| 30 October | Extratropical Northern Hemisphere Climates | 9 |
| 1 November | Extratropical Northern Hemisphere Climates | 9 |
| 6 November | Tropical and Southern Hemisphere Climates | 10 |
| 8 November | Tropical and Southern Hemisphere Climates | 10 |
| 13 November | Exam 2 | |
| 15 November | Climate Modeling | Lecture + 13 |
| 20 November | Paleoclimatology | Lecture + 11 |
| 22 November | No Class – Thanksgiving Break | |
| 27 November | Paleoclimatology | Lecture + 11 |
| 29 November | Anthropogenic Climate Change | Lecture + 12 |
| 4 December | Anthropogenic Climate Change | Lecture + 12 |
| 6 December | Climate Projections | Lecture + 15 |
| 13 December (1-3 p.m.) | Exam 3 | |

***Note: 7 December 2017 is the last day to turn in late assignments and makeup missed exams**