

ATMO 656 Tropical Meteorology
Fall 2004
TR 2:20-3:35, O&M Room 1209

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Office hours: Monday 3:00-5:00 (or by appointment)

Textbook: None. No modern, comprehensive tropical text exists. Handouts and/or pdf files will be made available throughout the semester.

Course description:

This class will be a survey of tropical weather phenomena with an emphasis on the importance of convection across the scale spectrum. We will read and discuss some of the most important papers in the broad body of tropical meteorology, along with delving into current research topics. An objective of this class is to provide students a solid understanding of the tropical literature along with the skills to critically read and clearly present the most relevant aspects of each work.

Topics:

Tropical climatology—Observations of the Tropics

Convective processes—Surface and boundary layer processes, cumulus dynamics and thunderstorms, mesoscale convective systems

Tropical Cyclones—Formation, structure, dynamics

Large-scale tropical phenomena—Waves, role of the Tropics in the general circulation, monsoons, MJO, El Niño Southern Oscillation

Exams and grades:

No exams. Grades will be based on classroom participation (20%), paired presentations (30%), and a term project and final presentation (50%). The paired presentations will consist of two students leading the discussion of a chosen paper. Each student will be responsible for two paired presentations during the semester. More information on the term project and final presentation will be provided later in the semester.

University Writing Center:

In order to assist you in writing, the University Writing Center (UWC), located in Evans Library 1.214, offers help at any stage of the writing process including brainstorming, researching, drafting, documenting, revising, and more; no writing concern is too large or too small. These consultations are highly recommended but are not required. While the UWC consultants will not proofread or edit your papers, they will help you improve your proofreading and editing skills. If you visit the UWC, take a copy of your writing assignment, a hard copy of your draft or any notes you may have, as well as any material you need help with. To find out more about UWC services or to schedule an appointment, call 458-1455, visit the web page at uwc.tamu.edu, or stop by in person.

Accommodations:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of the Koldus Building. The phone number is 845-1637.

Copyright and Plagiarism Policy:

All materials used in this class are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted. As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, <http://student-rules.tamu.edu/>, under the section "Scholastic Dishonesty."

The Honor Code:

The Honor Code, based on the long-standing affirmation that An Aggie does not lie, cheat, or steal or tolerate those who do, is fundamental to the value of the A&M experience. Know the Code. Aggie Code of Honor "An Aggie does not lie, cheat, or steal or tolerate those who do." <http://www.tamu.edu/aggiehonor/>