GEOL 4405/5405 METEOROLOGY AND CLIMATOLOGY

Lecture: Prof. Arne Winguth  Lab: Taylor Hughlett, B.S. Geology, Ph.D. Candidate

White Christmas in North Texas 2012 and Hurricane Sandy 2012

Lecture Section 001: Tuesdays Thursdays 9:30 –11 a.m., Geosciences Room 109
Lab Section 011: Tuesdays 2:00 – 3:20 p.m., Geosciences Room 246

Required Textbooks:

Complementary Textbook:

Course Description: A quantitative approach to the study of the structure, energy, and motions of the atmosphere

Student Learning Outcomes: After completion of this class, students will be familiar with the key terminology pertaining to the atmosphere and will have a well-rounded understanding of the major atmospheric processes of the atmosphere including thermodynamics, radiative transfer, atmospheric chemistry, cloud physics, dynamics, weather and climate prediction as boundary layer processes and urban heat island. This knowledge will enable them to have a fundamental knowledge in scientific problems and a better understanding of great societal important topics, such as severe weather, hurricanes, future climate change, meso to large-scale pollution, and environmental sustainability.

Office Hours: Instructor: Thursday, 11 a.m-12 p.m., or by appointment
Graduate Teaching Assistant: Tuesday and Thursday, 11 a.m. -12 p.m. or by appointment

Email: Instructor: awinguth@uta.edu, Rm GS238
Graduate Teaching Assistant: mray@mavs.uta.edu, Rm GS120
Phone: Instructor: 817-272 2977
Graduate Teaching Assistant: TBA
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1) Note Text: “Atmospheric Science”.

2) Web: IPCC 2007, [http://www.uta.edu/blackboard](http://www.uta.edu/blackboard)
Course Policies and Grading

Exams:
Exams will be multiple-choice questions and problem solving questions. No early exams are allowed.

Exams must be taken at the scheduled time. Make-up exams can be only taken in cases of illness or family emergency. A note from the University disciplinary officer or doctor may be required in these cases. Students who do not take an exam receive zero points as a grade on that exam. Make-up exams are scheduled and set by the instructor.

Grading and Grade Calculation:

Grading:  Lab Portion: 25% of course  
          Lecture Portion: 75% of course  

          Lecture Portion:  
          Quizzes (3)  5% of course (5% each)  
          Exams (2)  30% of course (15% each)  
          Final Exam  30% of course  

Final grade calculation:  
0.25 x lab + 0.15 x quizzes + 0.30 x exams + 0.30 x final exam  
Score will be translated into a grade based on class average.

Grades will not be released over the phone or by email. Grades must be either obtained in person or from the UTA online database.

Grading: Lecture Portion: 75% of course; Lab Portion: 25% of course

Extra credit:  
Extra credit assignments will count towards quizzes. Maximum average grade of quizzes will be no more than 100%.

Homework:  
Ten homework assignments as part of the lab section will be given throughout the semester. Maximum average grade of labs will be no more than 100%.

Attendance:  
Attendance is required and may be taken occasionally. Lack of attendance may influence the final grade.

Drop Policy:  
Students may drop or swap classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance.
**Students with Disabilities (Americans With Disabilities Act):**
Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:**
Academic dishonesty (such as cheating, plagiarism, taking an exam for another person, etc.) will not be tolerated in any form and will be disciplined in accordance with University regulations and procedures. All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

_I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code._

**Student Support Services:**
UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Electronic Communication:**
UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at [http://www.uta.edu/oit/cs/email/mavmail.php](http://www.uta.edu/oit/cs/email/mavmail.php).

**Student Feedback Survey:**
At the end of each term, students enrolled in classes shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to
solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

No use of cell phones (or other electronic devices) during exams.

Class Material: https://elearn.uta.edu/webapps/login/

Blackboard Info: http://www.uta.edu/blackboard/students/index.html