GEOL 1430
GLOBAL WARMING
Spring 2014

Instructor: Prof. Arne Winguth; Lab Instructor: Taylor Hughlett, B.S. Geology, Ph.D. candidate

Lecture: Tuesday Thursday 12:30-1:50 p.m., Geosciences Room 104
Lab Section 011: Thursday 2:00-2:50 p.m., Geoscience Room 202
Lab Section 012: Tuesday 2:00-2:50 p.m., Geoscience Room 246

Required Textbook:

Complementary reading:

Course Description: Future climate change is among the most serious environmental problems facing the world community. This class will survey the scientific basis of global warming and the impacts of climate change on human society. The course will discuss mitigation strategies for creating a more sustainable environment.

Student Learning Outcomes: After completion of this class, students will be familiar with the key terminology pertaining to climate change and will have a well-rounded understanding of the major processes, e.g. associated with sources of greenhouse gas concentrations, contributing to climate change and the impact of climate change on the droughts, flooding, health, and the economy. This knowledge will enable them to have a fundamental knowledge in scientific problems and a better understanding of great societal important associated with future climate change and concepts and decision-making for environmental sustainability.

Office Hours: Arne Winguth, TuTh 3:30-4 p.m. or by appointment, Geosciences Rm 238
Taylor Hughlett, TuTh, 11:30-12:30 or by appointment Geosciences Rm 117

Email: awinguth@uta.edu
Phone: 817-272 2977
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<td>Jan. 21, 23</td>
<td>Evidence of Climate Change</td>
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<td>Jan. 28, 30</td>
<td>Energy and Earth Climate</td>
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<td>Revealing Ancient Climates</td>
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<td>Methods to Analyze Past Climates</td>
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<td>Climate Change Projections and Global Impact of Climate Change</td>
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<td>Mar 18, 20</td>
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<td>Mar. 10-14</td>
<td><strong>SPRING BREAK</strong></td>
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<td>Climate Change Policy &amp; UN Protocols</td>
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<td>Apr. 15, 17</td>
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<td>Apr. 22, 24</td>
<td>Strategies to Mitigate Climate Change Geoengineering</td>
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<td>April 29, May 1</td>
<td>Review of Lecture Material</td>
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As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –Arne Winguth
Course Policies and Grading

Exams:
Exams will be mostly multiple-choice questions, but the final exam will also contain essay 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:

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<th>Grading</th>
<th>Lab Portion:</th>
<th>25% of course</th>
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<td>75% of course</td>
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Lecture Portion:
- Quizzes (3)  10% of course (3.3% each)
- Exams (3)  45% of course (15% each)
- Final Exam  20% of course

Final grade calculation:
0.25 x lab + 0.10 x quizzes + 0.45 x exams + 0.20 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:
Two extra credit assignments will be given during the class. 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 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.

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

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.

Final Review Week:
A period of five class days prior to the first day of final examinations shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. During this week, classes are held as scheduled. In addition, instructors are not required to limit
content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:**
Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. Leave through the main class door and out the front entrance of the Geoscience Building. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

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

Class Material: [https://elearn.uta.edu/webapps/login/](https://elearn.uta.edu/webapps/login/)

Blackbord Info: [http://www.uta.edu/blackboard/students/index.html](http://www.uta.edu/blackboard/students/index.html)