ATMOSPHERIC SCIENCES 3000
Professional Development in the Atmospheric Sciences - Fall 2019
Instructors: Associate Professor Gannet Hallar
816 WBB. Phone 801-587-7238.
gannet.hallar@utah.edu Office Hours: by appointment

Monday from 2-3:50 in WBB 820

Online resources: Access via the Canvas CIS system
Text Book: There is no text book for this course, but there are plenty of reading assignments

Course Description:
This course provides an introduction to the atmospheric sciences profession and related environmental fields. An overview of career opportunities in government, industry, and education are discussed with opportunities to meet professionals employed in selected areas such as: broadcasting; air quality; operational (federal and military), road and fire weather forecasting; data science; and climate science.

Employment needs and technologies within environmental fields are undergoing rapid changes and students are likely to transition through diverse employment opportunities during their careers. Discussions of what is expected of scientists in the work place will be a focus for the course: ethics and misconduct; field safety; communicating effectively with your peers and the public; and basic concepts of what is required to complete work-related reports and research responsibly. The roles of scientists to communicate information related to topics such as climate change, air quality, and land use policies affecting water availability and wildfires in the urban-wildland interface will also be discussed.

Atmospheric science majors will have opportunities to hear about research activities within the department that may be of interest to them for required capstone projects.

At the end of the course, you will be able to:
- Discuss career paths of interest to you in the atmospheric sciences and related fields
- Recognize how the atmospheric state in the past, present, and future affects society widely in terms of air quality, climate change, public safety, wildfires, and road weather
- Demonstrate awareness of actions (plagiarism, misconduct, etc.) that adversely affect the credibility of the scientific profession

Course Format: Teaching and Learning Methods
- This is an active course that requires you to begin and complete assignments as they are assigned- you must complete and turn in electronically assignments prior to each class period. There is no credit for late work. These assignments will then be discussed by everyone during class. Failure to complete assignments by the beginning of class may cause you to not be able to participate in class web-based or instrumentation-based assignments.
Assignments required to be completed include: quick summaries of info "in the news", reading assignments and on-line quizzes; and on-line COMET modules.

We will be visiting several off-campus facilities during the semester on Monday afternoon (primarily during class period) that will require transportation. We will carpool leaving at 1:50 PM and returning by 4:00 PM. If you have conflicts with classes or work on these dates/times, then it is your responsibility to complete a makeup assignment in advance of the off-site visits.

You are also strongly encouraged to attend weather discussions, which are held in 711 WBB on Tuesdays and Thursdays from 12:25-1:45 PM. You are required to attend at least one weather discussion during the semester and write a short report as a graded class assignment. If you have a class or work conflict for these class periods, then you must complete an on-line makeup assignment by week 4 of the semester.

Class Policies and Grading
Grades will be determined from class attendance, in-class assignments, and tours (30%) and assignments (70%). Plagiarizing, copying, or otherwise misrepresenting ones' work will not be tolerated and will be dealt with as harshly as permitted under University Policy. Do not break the scientific code of honor. Final grades are based on the following scale:
> 90 % guarantees an A or A-;
> 80 % guarantees a B+, B, or B-
> 70 % guarantees a C+, C, or C-
> 60 % guarantees a D+, D, or D-
< 60% may result in an E
Cutoff points for the specific grades are identified to define reasonable distribution of grades.

Course Outline

August 19 – Introduction to ATMOS 3000 and the Atmospheric Science Department

August 26 – Introduction to faculty within the Atmospheric Science Department via a poster session.

September 2 – LABOR DAY – NO CLASS

September 9 - Crystal Cory, Career Coach from the Career and Professional Development Center (CPDC) presents workshop on interviewing skills.

September 16 - Annie McMurtrey – Introduces the eTutoring and Online Writing Lab.

September 23 - Casey Hoekstra, Program Manager for the Learning Success Center presents workshop on time management and study strategies.

September 30 – Visit to Department of Environmental Quality - AIR QUALITY DIVISION
195 North 1950 West, Salt Lake City, UT 84116
October 7 – FALL BREAK – NO CLASS

October 14 – TBA

October 21 – Visit KTVX-TV ABC Channel 4 UTAH for tour from broadcast meteorologist, Dan Pope, 2175 West 1700 South, Salt Lake City, Utah 84104

October 28 - Visit Jeff Williams, UDOT Weather Operations and RWIS Manager / Meteorologist
UDOT Traffic Operations Center, Room 123, 2060 South 2760 West, Salt Lake City, UT 84104

November 4 – Visit the National Weather Service
2242 W North Temple, Salt Lake City, UT 84116

November 11 – Introduction to Student Success Advocates, Jeilani Athman

November 18 – TBA

November 25 – TBA

December 2 - TBA