Weather Forecasting

ATMOS 3010 Spring 2017

Instructor	Jeremy A. Gibbs, Ph.D. Email: jeremy.gibbs@utah.edu Office: MEK 2566 Hours: by appointment
Practicum	WBB 711, Mon and Wed, 11:50a-1:10p
Credit	1.5 hours
Text	There is no text! Dealing with Observations • Decoding the Metar • Interpreting Station Models COMET Modules • Operational Models Encyclopedia • Skew-T Mastery • Mesoscale Meteorology: A Primer For Forecasters • NWP Training Series Course 2 • Quantitative Precipitation Forecasting • Topics in Precipitation Type Forecasting • Fog and Stratus Forecast Approaches
Prerequisites	C- or better in ATMOS 1010 OR ATMOS 3200
Grading	Accuracy of Practicum Forecasts 50% Participation/Weather Briefings 25% Lab Assignments 25%

Course Description

ATMOS 3010 provides students with an introduction to the tools and techniques used for contemporary weather forecasting. Students analyze and forecast the weather in each class, with the instructor providing a guiding hand and stimulating discussion of forecast issues and techniques.

Course Objectives

At the end of this course, students should be able to effectively use meteorological observations, numerical weather analysis and prediction models, and statistical forecast tools to produce site-specific sensible weather forecasts in a time-constrained environment.

Forecast Practicum

Students produce in-class forecasts for the Salt Lake City International Airport (KSLC) and a floater site selected each morning before class. For each site, students produce a multi-variable forecast covering three sensible weather categories: temperature, precipitation, and wind. Forecasts are evaluated using traditional forecast accuracy metrics.

Weather Briefings

As part of the forecast practicum, students will separate into teams. Each team will present a total of two forecast briefings over the course of the semester. The briefings will be held at the start of each class and should last no longer than 10-15 minutes.

Computer Resources

Students may use computers in WBB 711, as assigned at the beginning of the class, or their personal laptops. IDV may be run on the lab computers or installed and run on personal laptops for integrated data analysis. Additional forecast tools will be accessed via web browsers.

ADA Accommodations

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangement for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

University of Utah Accommodations Policy (III.Q)

University of Utah Student Code of Conduct