**ATM 211: Weather Analysis and Forecasting**  
Spring 2017  

**Instructor:** Ross Lazear, ES-322  
Phone: 437-3601  
rlazear@albany.edu  
**Office hours:**  
2:45-3:45 PM, Mon. and Thur., and by appointment

**TA:**  
Eric Bunker: ebunker@albany.edu  
Office hours: 11:00-12:00, Mon. and Wed., ES-334

Class webpage: [http://www.atmos.albany.edu/facstaff/ralazear/ATM211](http://www.atmos.albany.edu/facstaff/ralazear/ATM211)

**Topics covered:**  
Atmospheric properties and measurements  
Satellite and radar  
Isobaric maps, levels of the atmosphere, and hand contour analyses  
Forces, force balances (geostrophy/Ekman/gradient wind)  
Forcing for ascent/precipitation, jets/jet circulation  
Fronts  
Cyclones (mid-latitude)  
Introduction to numerical weather prediction (models)  
Forecasting  
Atmospheric Stability  
Atmospheric flow patterns and properties

**Objectives:**  
The goals of this course are to teach you the fundamental “synoptic-scale” processes of the atmosphere. The final part of the course will teach you how to forecast for various cities around the country in a fun, yet competitive environment. Your responsibilities will include taking several quizzes on geography and lecture material, mapping and Skew-T assignments, exams, as well as forecasting during the final few weeks of the course.

**Grading:**  
*** 25% Quizzes  
*** 20% Mid-term  
*** 25% Final  
*** 30% Homework / maps / forecasting  
Late same day: 10% off; next day 20%; then 30%; 50%; no credit.

**Requirements:**  

**Prerequisites:**  
ATM 210(Z)/209  
(PHY 140)

**Cell phones:**  
Unless an emergency, please put away your cell phones during class.