ATM 211: Weather Analysis and Forecasting
Spring 2019

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Office hours:
2:00-3:00 PM, Mon., and 9:30-10:30 AM Wed., and by appointment

TA:
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Office hours: 10:30-11:30 AM, Mon. and Wed., ES-234

Class webpage: 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, 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:
Stull, Practical Meteorology: https://www.eoas.ubc.ca/books/Practical_Meteorology/

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

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