ATM 211: Weather Analysis and Forecasting
Spring 2020

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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: 10:00-11:00 AM Mon., and 3:00-4:00 PM Tue., and by appointment

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.

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

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

Absences:
Medical: Please refer to the University’s medical excuse policy:
https://www.albany.edu/health_center/medicalexcuse.shtml
**Religious observance**: New York State Education Law Section 224-A excuses absences due to religious beliefs. Students must notify the instructors in a timely manner prior to the absence.

**Undergraduate academic regulations, and standards of academic integrity**: [https://www.albany.edu/undergraduate_bulletin/regulations.html](https://www.albany.edu/undergraduate_bulletin/regulations.html)