

ATM 311

Severe and Hazardous Weather

Fall 2012 – Class # 1263 – Tue/Thur, 10:15-11:35 AM, Mon or Wed, 5-6 PM

Instructor: Ross Lazear, ES-322 Phone: 437-3601

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Office hours:

2:30-3:30 PM, Tue., and Thur., and by appointment

TA:

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Office hours: 3:00-4:00 PM Mon. and Wed.

Class webpage: <http://www.atmos.albany.edu/facstaff/ralazear/ATM311>

Topics covered:

El Niño and the “Southern Oscillation”

Tropical cyclones

Thunderstorms (supercells, MCS, seabreeze circulations)

Lightning and hail

Tornadoes

Severe weather indices

Blizzards

Ice storms

Lake effect snowstorms

Objectives:

The goals of this course are to teach you the fundamental processes associated with the various meteorological phenomena listed above, and furthering your forecasting expertise from what you learned in ATM 211. As a part of this course, you will be making your own short- and long-term forecasts for Albany, NY in our local forecasting competitions. Each week, your forecasts will be discussed in detail in a group setting during your lab section (Mon. or Wed., 5-6 PM in ES-333).

Grading:

*** **15% Quizzes:** Announced quizzes covering recent lecture material and geography.

*** **15% Mid-term**

*** **20% Final Exam**

*** **10% Forecasting** (details on a separate sheet)

*** **20% Homework and Projects**

*** **20% Map Discussion:** This will be broken up as 15% for your individual map discussion and forecast write-up (to be explained in discussion section), and 5% participation.

* **Note:** Attendance in your weekly discussion section is *mandatory*.

Requirements:

Severe and Hazardous Weather, 4 ed., Rauber et al.