

## ATM 311

### **Severe and Hazardous Weather**

Spring 2025 – Class #9120 – Lecture: Tue., Thur., 10:30-11:50 AM, ETEC 450  
Discussion: Sections #9121 and 9122 – Mon. and Wed., 4:30-5:25 PM, ETEC 450  
Instructor: Ross Lazear • ETEC 417 • Phone: 518-437-3601  
rlazear@albany.edu

#### **Ross Lazear's office hours:**

2:15-3:15 PM, Mon., and Wed.  
ETEC 417 (Zoom by request)

**TA: Emily Lucy** • ETEC 426 • elucy@albany.edu

Office hours: 3:15-4:15 PM Mon., and Wed., 3<sup>rd</sup> floor atrium

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

**Textbook:** No text required, but I like Severe and Hazardous Weather (Rauber et al. 6 ed):  
<https://he.kendallhunt.com/product/severe-and-hazardous-weather-introduction-high-impact-meteorology-0>

#### **Topics covered:**

Severe and hazardous winter weather  
Thunderstorms  
Supercells  
Mesoscale convective systems  
Hail  
Tornadoes  
Severe weather forecasting and case analysis  
Tropical cyclones

#### **Objectives:**

The goals of this course are to teach you the fundamental processes associated with the various meteorological phenomena listed above, and honing your weather forecasting skills. As a part of this course, you will be making your own short-term forecasts for Albany, NY in our local forecasting competition. Each week, your forecasts will be discussed in detail in a group setting during your discussion section.

#### **Grading:**

\*\*\* **20% Quizzes:** Announced quizzes covering recent lecture material and geography.

\*\*\* **15% Midterm**

\*\*\* **25% Final**

\*\*\* **40% Homework, projects, map discussion:** Combination of homework assignments, discussion participation, forecast contest participation, weather discussions

Late same day: 10% off; next day 20%; then 30%; 50%; no credit.

Typically, final grades are distributed approximately as such:

93% A / 90% A- / 87% B+ / 82% B / 80% B- / 77% C+ / 72% C / 68% C- / 65% D+ / 60% D

However, I will use my discretion to curve this scale, especially in cases where students show appreciable learning of the material by the end of the semester.

#### **Prerequisite:**

ATM 211

**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/medicaexcuse.shtml](https://www.albany.edu/health_center/medicaexcuse.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)

**Mental health:**

Your mental health is also of utmost importance! Please take care of yourself and reach out to me if you need any help. You're always encouraged to reach out to Counseling and Psychological Services (CAPS) at 518-442-5800 or [consultation@albany.edu](mailto:consultation@albany.edu) to schedule a virtual appointment. The [CAPS website](#) has helpful resources as well.