

ATM 362

National Weather Service Operations

Spring 2022 – Class # 9074 – Mon., 4:30–5:25 PM

Instructors: Mike Evans, Kevin Lipton, and Ross Lazear

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Instructor availability:

Ross Lazear

Office hours 2:00-3:00 Monday, and 9:30-10:30 Wednesday (and by appointment)

Ross Lazear's Zoom link: <https://albany.zoom.us/j/620353582>

Mike Evans and Kevin Lipton:

Office hours by appointment and email

Prerequisite: AATM 311

Topics covered:

A Winter Weather Forecast Process (MSE – Mon Jan 24)

Intro to NWS + Ground Truth/Observations and Data Quality (CS - Mon Jan 31)

Winter Weather/Ensembles + anomalies (NAS – Mon Feb 7)

Aviation Forecasting (KSL – Mon Feb 14)

NON-NWS Lesson - Mon Feb 21 (FEDERAL HOLIDAY)

Lake Effect Snow Forecasting/GIS Apps in NWS (JPV - Mon Feb 28)

Radar Interrogation, DUAL-POL Apps, and Severe WX (BJF/TAW – Mon Mar 7)

Hydrology (BEW – Mon Mar 21)

Lab 1 (Mon Mar 28)

Lab 2 (Mon Apr 4)

Lab 3 (Mon Apr 11)

IDSS/Crisis Media (ATE/CS – Mon Apr 18)

Extreme Local Events – potential for societal disruption (SND – Mon Apr 25)

NWS Careers/Getting into NWS (MSE/SND/ROK – Mon May 2)

Objectives:

The goals of this course are to cover many of the roles of operational meteorologists in the National Weather Service, and teach some forecasting methods and philosophy as well. The course will feature different instructors each week, each with expertise relevant to operational meteorology.

Structure:

The course will consist of weekly lectures, with three labs. During or after each lecture, you will be expected to complete an open-notes quiz, the answers to which will be emailed to the seminar speaker and to Kevin Lipton by the Friday following the lecture. The lectures and any lab/reading material will be posted on the web in a Google Drive, the link to which you should have been sent prior to the semester beginning.

Lab days will be interactive, with assignments and/or reading in the weeks leading up to the labs. The labs may run longer than the typical hour-long class day.

Grading:

The course is graded S/U (satisfactory/unsatisfactory). Satisfactory grades will be given based on satisfactory completion the following requirements:

***** Homework/labs**

***** Lecture quizzes:** You must answer short (approximately five questions) quizzes by email after attending each lecture (due the Friday following Monday's lecture).

***** Attendance:** One unexcused absenced is allowed, but otherwise you must attend all classes during the scheduled class time.

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