ATM 211 Forecasting Steps…

1. Get a good grasp of the *current situation*. Check out **satellite** photographs and loops, **radar** loops, and the hourly **METAR** weather observations for Albany and the surrounding region. Read through the latest National Weather Service **forecast discussions** from the local offices.

2. Look at *analysis maps* (**surface** and **upper air**) to see how synoptic-scale features have been moving and/or intensifying over the past couple of days up to the present time.

3. Begin looking at forecast maps from various models. Note upper-level forcing, and low-level airmasses within the forecast period. Note precipitation intensity, timing, and differences amongst models. Take note of model trends. For short-term, use high-resolution models (HRRR, 3-km NAM, WRF, etc.).
Use Tomer Burg's page: www.polarwx.com
or Tropical Tidbits:
https://www.tropicaltidbits.com/analysis/models/

4. Text-based output (extrapolated and MOS) from the NAM and GFS are available. For the ATM 211 contests, use:
http://www.atmos.albany.edu/facstaff/ralazear/fcst/fcst.html
Once again, take note of model differences, trends, and recent biases.

5. *Finally…* Look at model soundings and compare surface temperature with MOS and the NWS. For short-term forecasts, extrapolate the current satellite/RADAR, and see if the MOS variables agree with the current situation. Use your own intuition; if the NAM has been too low on the highs lately (and the synoptic pattern is remaining relatively similar), keep it in mind when you forecast.

6. Forecast!

7. Most importantly, *learn from your mistakes*. Everyone will make them from time to time. It's important to ask yourself why your forecast was wrong. Did lower-tropospheric mixing clear out morning clouds so the high was warmer than you expected? Did overnight precipitation cause the temperature to "wet-bulb," resulting in a lower overnight low than you forecast? Make sure you do this, so you don't keep repeating the same mistakes.