

# **GEOG 412 SYNOPIC METEOROLOGY: EXTREME WEATHER EVENTS**

**Spring 2023**

**TR 11:00-12:15, DE402**

**Professor: C. E. Konrad**



This course describes the ingredients and recipes responsible for the production of extreme weather events observed across North Carolina. The ingredients refer to the set of physical conditions and processes that come together to produce the extreme weather and the recipes, in turn, describe the different ways in which the ingredients can be brought together in space and time to spawn the extreme weather.

We examine cold air outbreaks, ice storms, snowstorms, windstorms, thunderstorms, heavy rainfall, tornadoes, hurricanes, heat waves, and drought. Additionally, we discuss the morphology and structure of these weather systems, and their climatology, specifically where and how frequently they occur. Lastly, we examine how the frequency of these extreme events may be responding to climate variability and change.