

## **EAS 8803 – Clouds and Precipitation**

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### **Teaching Assistants:**

None

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## **PART 1: INTRODUCTION**

*Review of moist thermodynamic processes in the atmosphere*

- Humidity variables
- Isobaric cooling: dew point and frost point; radiation fog
- Cooling and moistening by evaporation of water: wetbulb temperature; prefrontal rain fog
- Saturation by adiabatic, isobaric mixing: steam fog and jet contrails
- Saturated adiabatic cooling: equivalent potential temperature; saturated adiabatic lapse rate, adiabatic liquid water content; convective cloud formation
- Aerological diagrams