



**Winter 2025**

## **WEATHER 101**

**WHAT CAN YOU "READ" IN THE SKY?**

CTC Campus (18700 SE Mill Plain Blvd.), Room #338

**Instructor:** Prof. Kyle Dittmer

**Phone:** (503) 731-1314

**E-Mail:** kdittmer@clark.edu

**Course Description (Item #41304, Fee \$125):**

Learn basic weather reading skills to help the Gardener, Hiker, or outdoor person. Learn to read weather maps, interpret cloud formations, understanding our local climate, and gain practical weather knowledge. Taught by a USDA-Graduate School certified Meteorologist and former NOAA/NWS Portland office forecaster.

**Learning Outcomes:**

- Learn the basic science of Meteorology and Climate Science (and the causes of Climate Change)
- Learn to work with and interpret many types of weather maps
- Learn how to produce a weather forecast
- Learn the practical everyday living aspects of weather science

**Course Schedule (January 29th, February 5th, 12th, 19th, 26th; 1:30 to 3:30 pm):**

Week 1: Introduction: Overall picture of the atmosphere, Air Masses, energy budget, global heat distribution.

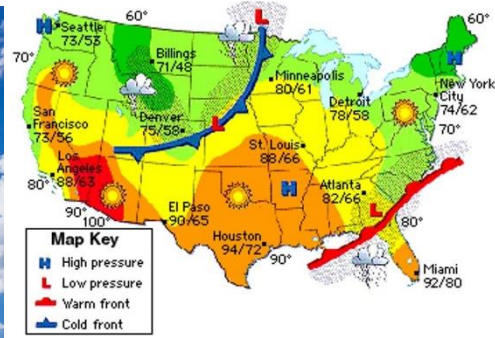
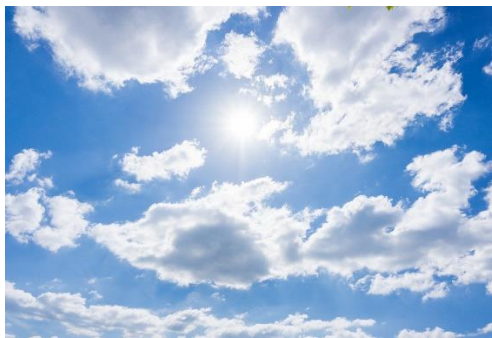
Week 2: Clouds: How do clouds form, types of clouds and their weather significance; Humidity; Precipitation. Atmospheric Motion: Driving/Resisting forces, vertical changes, Cold Fronts,

Warm Fronts. Weather Forecasting: How to put together a forecast and evaluate it; Interpreting a variety of weather maps.

Week 3: Special Guest Speaker: Tanja Fransen, Meteorologist-in-Charge, NOAA/NWS – Portland Office. Severe Weather: Thunderstorms, Lightning, Tornadoes, Hurricanes, and associated safety measures.

Week 4: Hydrology: water cycle, snowmelt, Water Supply Forecasts, streams, flooding, risk assessment. Climate Science: climatology, climate change and its causes, ENSO phenomena (e.g., *El Niño*, *La Niña* events).

Week 5: Practical: Hikers, Travelers, Homeowners, Maritime users, Farmers and Gardeners, weather education. Specialty Topics: per student interest. 😊



### **Selected Bibliography/Resources:**

- “Essentials of Meteorology”, 8th Ed. (2018), by Ahrens/Hensen (see instructor for free link)

**Class Evaluation:** Class evaluations are sent by email. Sometimes the email will be delivered to your “junk mail,” but we can assure you it’s from Clark College only. Your responses are completely anonymous. If you do not see your evaluation immediately after class, look in your junk mail and send it to your email address. If you do not receive an evaluation, please call 360.992.2939.

### **Inclement Weather:**

If the College cancels due to icy conditions you can find this on the college website:

[www.clark.edu](http://www.clark.edu) ~ If Community Education concludes that the weather is too hazardous, we may

also decide to cancel this class. In that case you will receive both a phone call and email. Make certain that we have your correct contact information by viewing the class roster.

**Looking for classes? Visit our Community Education webpage: [www.clark.edu/cce/](http://www.clark.edu/cce/)**