



Next class starts: **Mar 6 2017**

Duration: 7 weeks (Tuesday nights, 7:00pm - 9:00pm)

Pre-requisites: none

Cost: \$120. [Register online](#) or contact the [course instructor](#) .

This course covers many aspects of the formation and behavior of the weather around us. Meteorology (the study of weather) is quite technical in nature. In contrast, "Fundamentals of Weather" is presented in a straightforward manner eliminating much of the jargon.

The study of weather is both fascinating and satisfying. The skills you will develop from this course will serve you for a lifetime. With practice, it will become possible for you to make short

term forecasts. Challenge the professionals as to who better predicts the weather in your local area.

After completing the course, you will forecast the weather beyond "red sky at night ..."

Subject Areas:

How the Sun Causes Weather: Topics include the troposphere, tropopause and stratosphere. How the sun causes weather. The earth's heat budget and how it is balanced. Explains why the sky is blue.

What causes the Wind to Blow? - Explanation of barometric pressure. High and low pressures - airflow and circulation. Land and sea breezes. High and low pressure patterns. Buys-Ballot's law. The Beaufort scale. Marine Weather warnings. Winds and waves.

Water in the Atmosphere - The different states of water. The hydrologic cycle. Types of precipitation and fog.

Clouds - The signposts of the skies. Clouds and cloud formations. Vapour trails or contours. Low clouds as weather indicators.

Fronts and Frontal Weather - Warm fronts and associated weather patterns. Cold fronts and associated weather patterns. Stationary fronts. Frontal depressions. Occlusions. TROWAL. The jet stream.

Thunderstorms and Tornadoes - Equilibrium of the atmosphere - stability and instability. What causes air to rise? Air mass thunderstorms. Cold front thunderstorms. Lightning and thunder. Safety precautions for thunderstorms and tornadoes. Waterspouts.

Forecasting the Weather - Weather forecasts and sources of information. Weather log. Your own forecast. Weather trivia.