

Course Title:	Content Area:	Grade Level:	Credit (if applicable)
Meteorology	Science	10-12	0.5

Course Description:

Students in this course learn meteorology by developing an understanding of the multiple factors that lead to weather patterns, weather formation and climate. The major topics of study include: Solar radiation, atmospheric moisture and stability, precipitation, air pressure and circulation, air masses and fronts, and changing climates. This course embeds multiple hands-on and virtual lab experiences to enhance students' knowledge and class experience. Students will be expected to maintain a detailed and scientific weather journal, as well as research weather and climate events and share their findings through projects, models, written and/or oral reports and presentations.

Aligned Core Resources:

Grade 6 Science-Destructive Weather
Physical Science-The Year without Summer

Connection to the [BPS Vision of the Graduate](#)

Critical Thinking and Problem Solving

Additional Course Information:

Knowledge/Skill Dependent courses/prerequisites

Link to [Completed Equity Audit](#)

Standard Matrix

District Learning Expectations and Standards	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
HS-ESS2-1 . Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.						X		
HS-ESS2-2 . Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.	X							X
HS-ESS2-4 . Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.	X	X		X	X		X	X
HS-ESS2-5 . Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.		X		X	X		X	
HS-ESS2-6 . Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere								X