PSCI 114 Introduction to Meteorology

Credit Hours: 1

Scheduled hours per week
- Lecture: 1
- Lab: 0
- Other: N/A

Catalog Course Description: This course covers the basic concepts of meteorology (weather and climate). The course is designed for students seeking the Bachelor of Arts Degree in Elementary Education General Science 5-9 Specialization.

Pre-requisites: N/A

Co-requisites: N/A

Course Learning Outcomes:
- Ability to demonstrate critical thinking by analyzing data to infer logical conclusions.
- Ability demonstrate and practice the scientific method of investigation of a problem or idea.
- Ability to collect accurate scientific data by practicing accurate data collecting techniques.
- Practice experimentation and/or observation of nature in order to evaluate scientific questions or scientific problems.
- Ability to analyze data by using graphing and other techniques to infer general trends in data and make inductive inferences.
- Ability to make hypothetical-deductive predictions relative to scientific concepts and understand how to test those predictions.
- Capability to correctly practice the steps involved in solving problems with the scientific formulas.
- Ability to take measurements and do calculations using the basic metric system of measurement.
- Ability to understand demonstrate principles of Meteorology
- Ability to understand, demonstrate, and analyze the fundamental principles of weather patterns

Topics to be studied:
- Principles of Meteorology
- Earth’s weather patterns
- Earth’s atmosphere and its relation to climate and weather
- General causes of climate and weather, global climate, and regional climate

Relationship of Course to Program or Discipline Learning Outcomes:

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<tr>
<th>Relationship of Course to Science Learning Outcomes:</th>
<th>X</th>
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<tbody>
<tr>
<td>Students will learn the process and reasoning behind the Scientific Method and be able to conduct experiments that meet the requirements of the model.</td>
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<tr>
<td>Students exhibit the basic safety-related rules and regulations of working in the lab.</td>
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<tr>
<td>Students be able to recount the basic safety tenants associated with a specific scientific discipline.</td>
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<td>Students will become proficient at Science Writing.</td>
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Students will recognize and identify the applications of their specific discipline in the ‘real world.’ X

Students will accurately recount important milestones in the history of scientific inquiry in their discipline. X

5/3/2016

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<th>Relationship of Course to General Education Learning Outcomes:</th>
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<tr>
<td><strong>Composition and Rhetoric</strong> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements. X</td>
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<td><strong>Science &amp; Technology</strong> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions. X</td>
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<td><strong>Mathematics &amp; Quantitative Skills</strong> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts. X</td>
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<td><strong>Society, Diversity, &amp; Connections</strong> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication. X</td>
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<td><strong>Human Inquiry &amp; the Past</strong> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills. X</td>
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<td><strong>The Arts &amp; Creativity</strong> Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art. X</td>
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**Special requirements of the course:**

N/A

**Additional information:**

N/A

**Prepared by:** Valerie Keinath

**Date:** 10/20/2017