## COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Special Topics: Climate Change - Challenges and Controversies</th>
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</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Science</td>
</tr>
<tr>
<td>Curriculum:</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Date submitted:</td>
<td>(07-106)</td>
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### Course Code: (eg. ACC 101) EAS*298
### Course Type:
- L: Lecture

### Elective Type: S
- E: English
- FA: Fine Arts
- HI: History
- HU: Humanities
- LA: Liberal Arts
- FL: Foreign Language
- M: Math
- S: Science
- SS: Social Science
- G: General

### Prerequisites:
- C- or better in Academic Reading AND Writing: Introduction to Composition, or placement into Composition

### Corequisites:
- None

### Other Requirements:
- None

### Ability Based Education (ABE) Statement
At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

### Catalog Course Description:
An introduction to Earth’s climate, climate change, and the interactions between climate, society, and the global environment. Topics explored are climate classifications, global warming, the greenhouse effect, ozone depletion, regional drought, and cataclysmic climate change. Man-made climate change is discussed with natural variability, and potential human responses to climate change are debated. **Prerequisites:** C- or better in Academic Reading AND Writing: Introduction to Composition, or placement into Composition.

### Topical Outline:
List course content in outline format:
1. Introduction and Overview
2. Primary Current Energy Sources

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Original 4/10/07
3. History of Climate Science  
4. Social Context of Scientific Knowledge  
5. Monitoring and Modeling: Ongoing Evidence  
6. A “Southern” Perspective on Climate Change  
7. State of Play in Evolving Debates  
8. Environmental Impact of Climate Change  
9. Pace and Scope of Climate Change  
10. New England Impacts and the Warming of Connecticut  
11. Social Impact of Climate Change  
12. Climate Change in the Media  
13. Policy Alternatives/Institutional and Civil Society Initiatives  
14. Summation: Solutions and where can we go from here?

**Upon successful completion of this course, the student will be able to do the following:**

1. Describe and explain the origins and development of climate science  
2. Summarize and evaluate the arguments that climate change is a) a natural cycle and b) attributable to human action  
3. Identify and describe the principal alternatives to fossil fuels as a source of energy  
4. Explain the relationship between climate, environment and eco-system  
5. Identify and describe the potential economic effects of climate change upon developed and developing nations  
6. Explain how changes in the earth’s climate could affect the growth and movement of human populations  

**PROGRAM:** *(Numbering reflects Program Outcomes as they appear in the college catalog)*  

N/A  

**GENERAL EDUCATION:** *(Numbering reflects General Education Outcomes as they appear in the college catalog.)*  

**Assessment will be based on the following criteria:**  
Examinations  
Quizzes  
Readings as assigned  
Term paper or project  
Final Exam
### Instructional Resources:
List library (e.g. books, journals, online resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

<table>
<thead>
<tr>
<th>Required:</th>
<th>Desired:</th>
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<tbody>
<tr>
<td><strong>Textbook(s)</strong></td>
<td>Ruddiman, William F., <em>Earth’s Climate, Past and Future</em> W.H. Freeman (2008) or alternate Handouts</td>
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</tbody>
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