EDU 111 Teaching Climate Change

Course Description
Pedagogically content based course designed to instruct teachers and resource managers the science behind climate change and methods to teach culturally- and locally-relevant general and climate science. The knowledge and tools will be geared to teaching climate change to 6th - 9th grade students and community members.

Course prepared by: STEM / Education October 2013

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<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<td>Laboratory 2.5</td>
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<td>Clinical 0</td>
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<td>Seminar 0</td>
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<td><strong>Total Credit Hours</strong></td>
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Purpose of Course:
- Degree Requirement
- Degree Elective X
- General Education
- Certification X
- Developmental
- Other

Prerequisite(s): C or better in ENG 101 and ENG 105

Signature, Curriculum Committee Chairperson

Signature, Dean of Academic Affairs

Signature, Vice President of Academic and Student Affairs

Last Date reviewed or revised: ___ / ___ / ___
I. Teaching Climate Change

II. Course Outcomes

A. General Outcomes

The student will:

1. Demonstrate knowledge of the science of climate change and the earth's climate system (EDU 1, 2, 5)
2. Describe the impacts of climate changes and climate adaptations for small islands (EDU 5)
3. Analyze and critique issues pertaining to global warming and climate change (EDU 2, 5)
4. Participate in a field activity teaching the fundamentals of climate change (EDU 4, 5)
5. Utilize culturally- and locally-relevant climate science curricula (EDU 1, 4)

B. Specific Outcomes

Upon completion of this course, the student will be able to:

1. Explain in simple scientific language what climate change is, the earth's climate system and the role of the earth's climate system on climate change
2. Research, discuss, and present information and conclusions about how Pacific island communities can increase resiliency to impacts of climate change
3. Critique and present on the science of global warming and climate change.
4. Prepare lesson plans using the content of the course and teach in an authentic classroom or community situation.
5. Utilize or modify existing climate science curricula in culturally- and locally-relevant ways

III. Course Content

This course is designed to teach teachers and resource managers the science behind climate change and how to teach culturally- and locally-relevant climate science.

1. Greenhouse effect
2. El Niño
3. Difference between climate and weather
4. Ocean and wind circulation
5. Carbon cycle
6. Carbon dioxide emissions
7. Global warming and impacts of climate change on island ecosystems and humans systems

VI. Methods of Instruction

1. Lectures and discussions
2. Weekly laboratory activities and experiments
3. Overhead/LCD and audio-visual presentations
4. Reading and writing assignments
5. Computer tutorials
VII. Equipment and Materials

1. Laboratory equipment for conducting lab
2. Computers
3. Videos and computer tutorials

VIII. Suggested Methods of Evaluation

1. Daily writing assignments
2. Laboratory reports
3. Oral laboratory report/group assignment
4. Journal writing and submission
5. Lesson plan delivery

Letter grades will be assigned per CMI Grading System.