

Independent Study Course Syllabus

Course Number: SCI 920

Course Title: Classroom Science – Ecology-Pollution. (Methods and Activities)

☐ Online ☒ Distance Learning

Instructor: Marvin Harms

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Units: 3

Grade Level: K-12

Course Description:

This methods course is designed to explore how the study of Ecology-Pollution can be used to enrich the science programs. The participants are required to complete and evaluate a planned series of lessons and/or experiences with their students. This course is in alignment with the California State and National Science Standards. Common Core State Standards for Literacy in History /Social Studies, Science, and Technical Subjects are included in lesson plans and assignments. All of these lessons and/or experiences may be used with children in the classroom, home, and/or neighborhood.

Course Dates

Self-paced; students may enroll at any time and take up to one year to complete assignments.

You have up to one year from the date of registration, and no less than three weeks (one week per credit), to complete the course.

Course Requirements:

1. The teacher is to do the 15 lessons and/or experiences with his/her class. Fill out a evaluation sheet for each assignment that you do. These are not required for experiences.
2. The teacher may write lessons of her/his own.
3. The teacher is to list the State and/or National Science Standards and Common Core Literacy Standards in Science that were met teaching each lesson.
4. Write a one page report describing how this class enhanced your curriculum.

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Content Standards:

Students will apply grade level standards applicable to their state or local district standards. <http://corestandards.org/the-standards> Download Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects.

Primary Learning Outcomes.

1. Teachers who take this course will know how to make science learning relevant to daily life.
2. Teachers will know how to effectively present the study of Ecology-Pollution in a variety of situations.
3. Teachers will be able to articulate how the State and/or National Science Standards were met using this material.
4. Teachers will use science to understand and describe the local environment.
5. Teachers will understand that major scientific breakthroughs may link large amounts of knowledge, build upon the contributions of many scientists, and cross different lines of study.
6. Teachers will understand that scientific discovery is often a combination of an accidental happening and observation by knowledgeable persons with an open mind.

Schedule of Topics and Assignments.

Take a look at the curriculum required by your district. Perform the lessons and/or experiences included in this course and outlined in the “Grading Rubric” that are appropriate to meet the needs of your district. By doing the lessons and/or experiences, you will be able to become more proficient in your ability to communicate with your students, parents, fellow teachers and administration.

Lessons and/or experiences are designed with the busy life of a teacher in mind. The lessons are designed to give you a basic format from which to develop the concepts. The evaluation sheets are designed so that you may evaluate your teaching strategy. The evaluation sheets are to be sent to the instructor when you complete the course.

Grading and Rubrics:

Check Grading Rubric for points given.

Final Course Grade and Transcripts

When all work for the course has been completed, students will need to logon to the Center for Professional Development website (<http://ce.fresno.edu/cpd>) to “Submit Grade Form”. Once the instructor fills out the grade form online, students may log back in to request their Grade Report as well as order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information see the Independent Studies Policies and Procedures that were sent to you when you received your course materials, or in your online course. They are available, also at <http://ce.fresno.edu/cpd> - under General Information > CPD Policies.

Plagiarism and Academic Honesty

All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled according to the procedures set forth in the Fresno Pacific University Catalogue. URL <http://www.fresno.edu>.

CONTINUING EDUCATION PROGRAM STUDENT LEARNING OUTCOMES:

CE 1. Demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to inform and persuade others, and present information applicable to targeted use.
CE 2. Demonstrate comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
CE 3. Reflect on their personal and professional growth and provide evidence of how such reflection is utilized to manage personal and professional improvement.
CE 4. Apply critical thinking competencies by generating probing questions, recognizing underlying assumptions, interpreting and evaluating relevant information, and applying their understandings to the professional setting.
CE 5. Reflect on values that inspire high standards of professional and ethical behavior as they pursue excellence in applying new learning to their chosen field.
CE 6. Identify information needed in order to fully understand a topic or task, organize that information, identify the best sources of information for a given enquiry, locate and critically evaluate sources, and accurately and effectively share that information.

FRESNO PACIFIC UNIVERSITY STUDENT LEARNING OUTCOMES

Student Learning Outcomes Oral Communication: Students will <i>exhibit</i> clear, engaging, and confident oral communication – in both individual and group settings – and will critically <i>evaluate</i> content and delivery components.
Written Communication: Students will <i>demonstrate</i> proficient written communication by <i>articulating</i> a clear focus, <i>synthesizing</i> arguments, and utilizing standard formats in order to <i>inform</i> and <i>persuade</i> others.
Content Knowledge: Students will <i>demonstrate</i> comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
Reflection: Students will <i>reflect</i> on their personal and professional growth and <i>provide evidence</i> of how such reflection is utilized to manage personal and vocational improvement.
Critical Thinking: Students will <i>apply</i> critical thinking competencies by <i>generating</i> probing questions, <i>recognizing</i> underlying assumptions, <i>interpreting</i> and <i>evaluating</i> relevant information, and <i>applying</i> their understandings to new situations.

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Moral Reasoning: Students will <i>identify</i> and <i>apply</i> moral reasoning and ethical decision-making skills, and <i>articulate</i> the norms and principles underlying a Christian world-view.
Service: Students will <i>demonstrate</i> service and reconciliation as a way of leadership.
Cultural and Global Perspective: Students will <i>identify</i> personal, cultural, and global perspectives and will employ these perspectives to <i>evaluate</i> complex systems.
Quantitative Reasoning: Students will accurately <i>compute</i> calculations and symbolic operations and <i>explain</i> their use in a field of study.
Information Literacy: Students will <i>identify</i> information needed in order to fully understand a topic or task, <i>explain</i> how that information is organized, <i>identify</i> the best sources of information for a given enquiry, <i>locate</i> and critically <i>evaluate</i> sources, and accurately and effectively <i>share</i> that information.