

Independent Study Course Syllabus

Course Number: SCI 902

Course Title: Classroom Science – Plants (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 Plants available on the school site and in the community can be used to enrich the science programs. The participants are required to complete and evaluate a planned series of experiments 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 experiments 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 15 experiments and/or experiences with his/her class. Fill out an evaluation sheet for each assignment that you do. These are not required for experiences.
2. The teacher may write experiments 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 experiment.
4. Write a one page report describing how this class enhanced your curriculum.

Content Standards:

The outcomes and course materials are aligned to and are supported by the six Science Teaching Standards, which are contained in the National Science Education Standards and can be located At http://www.nap.edu/openbook.php?record_id=4962&page=1

Content standards for experiments and experiences in this course are aligned to the National Science Education Standards that can be applied to each of the grade level content areas for : History/Social Studies, Science, and Technical Subjects. Go to pages 60 - 66 to see the Common Core Life science. Earth and space science. Science and technology. Science in personal and social perspectives. History and nature of science. Students will apply grade level standards applicable to their state or local district standards.

Primary Learning Outcomes.

1. Teachers who take this course will be able to demonstrate how to make science learning relevant to daily life by applying the information learned to lessons and experiments for classroom use.
2. Teachers will be able to effectively present the study of plants 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 be able to demonstrate how to teach this material effectively through lesson plan development.
5. Teachers will be able to describe the local environment using science and scientific principles.
6. Teachers will be able to describe the major scientific breakthroughs may link large amounts of knowledge build upon the contributions of many scientists, and cross different lies of study.
7. Teachers will be able to explain 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 experiments 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 experiments, you will be able to become more proficient in your ability to communicate with your students, parents, fellow teachers and administration. Experiments and/or experiences are designed with the busy life of a teacher in mind. The experiments are designed to give you a basic format from which to develop the concepts.

Grading and Rubrics

Check Grading Rubric for points given.

Students are not permitted to reduce the number of units in an independent study or online course for which they are enrolled.

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Date of Revision 12/1/15

To register for courses go to <http://ce.fresno.edu/cpd> and log in

Receiving Credit

Students may not receive credit for duplicate courses. Grades will not be posted until all tuition and fees have been paid to the university.

Grading System

Independent Study Courses are graded as either “A,” “B” or “Credit,” “No Credit.” “Credit” is equivalent to a letter grade of “B.” A grade of “No Credit” will be issued if coursework does not meet the course requirements. Students must choose a letter grade or grade of Credit when completing the online grade form. The default grade is “Credit.”

A grade of “No Credit” will automatically be issued if coursework is not completed within one year from date of registration, and an extension has not been requested.

Re-Enrollment

Students may re-enroll in Independent Study Courses if they have previously received a grade of “No Credit.” Current tuition/fees will apply.

Grade Appeals

Grade appeals must be made within one year from the date the grade report was issued. Appeals must first be presented to the instructor. If necessary, a second appeal may be made to the CPD Director of Independent Studies, and finally to the Continuing Education Executive Director.

Important Note: Health/Physical Education (HPE) and Computer Technology (TEC) courses do not fulfill the computer or health component requirements for the California Clear Credential.

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:

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| 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

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| 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. |
| 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. |