FRESNO PACIFIC UNIVERSITY

CENTER FOR PROFESSIONAL DEVELOPMENT

# Independent Studies Course Syllabus

**Course Number: SCI 902A- Classroom Science, Plants. (Methods and Activities, Grade K-12)**

**Instructor: Marvin Harms**

**Contact Information**

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**Number of Units: Three**

**Course Description:**

**This online 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**

**This course is self-paced; students may enroll at any time and take up to one year to complete assignments. (Three week minimum)**

**Course Materials.**

**All of the materials are found online.**

**Moodle Site**

**Students will be required to work in the Moodle environment. For those students who do not have access to a Moodle site on a school or district server, free options are provided.**

**Technology Requirements (For online courses)**

**In order to successfully complete the course requirements, course participants will need Internet access, be able to send and receive email, know how to manage simple files in a word processing program, and have a basic understanding of the Internet.**

**Please remember that he instructor is not able to offer technical support. In the event that you need technical support, please contact your Interned Service Provider.**

**If you need help logging on to the Moodle site, contact The Help Desk at Fresno Pacific University by telephone 1 559 453 3410 or by email helpdesk@fresno.edu.**

**Course Requirements:**

1. **The teacher is to do 15 experiments and/or experiences with his/her class. Post the answers to the questions in the Forum section under each experiment.**

2. **The teacher may posts experiments of her/his own. There is a place to do this in the Field Trip section.**

3.. **The teacher is to post the State and/or National Science Standards and Common Core Literacy Standards in Science that were met teaching each experiment on each forum where requested.**

4. **Post a one page report describing how this class enhanced your curriculum in the Forum at the top of the main page.**

**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 : Unifying concepts and processes in science. Science as inquiry. Physical science**

**http://corestandards.org/the-standards Download Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. Go to pages 60 - 66 to see the Common Core**

**Standards for this Class.**

**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 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. Teach the concept that meets the needs of your district and post the responses in the Forum section under the Experiment.**

**Evidence of Learning.**

**Instructor will assess student's learning based on evaluation of work submitted by students based on class participation, reflective writing, and criteria established for each assignment and/or experiment or experience.**

**Grading and Rubrics .**

**Grades will be assigned based on points earned during the course. Grades will be given on the following basis: A=99-110 points, B=88-98 points. For a credit grade you must have at least 88 points.**

**Submitting the Grade Form.**

**The Grade Form is to be completed online. Look on the left of the top page and you will see Grade Form under Administration. If you have not created a login account, you will need to do so. http://ce.fresno.edu.**

**Instructor/Student Contact.**

**Built into the course requirements, are several contacts between the course instructor and the student. Questions are addressed and assistance is offered through these contacts between the instructor and student. These contacts are confirmed when the Student goes online and posts the assignment's.**

**Policy on Plagiarism .**

**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 Catalog. Alignment to Fresno Pacific University Desired Student Outcomes: Graduate level course work reflects Fresno Pacific University's Desired Student Learning Outcomes as it applies to professional development to demonstrate the following:**

**• Oral and written communication individual and group settings.**

**• Content knowledge, and application of such knowledge in the student's area of interest to affect change.**

**• Reflection for personal and professional growth.**

**• Critical thinking.**

**• Cultural and global perspectives to understand complex systems.**

**• Computational/methodological skills to understand and expand disciplines, including an understanding of technological systems"**

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**Undated 11/25/11**