

**College of San Mateo**  
**Official Course Outline**

1. **COURSE ID:** PHYS 126    **TITLE:** Teaching Science I: K-5 Classroom Experience and Seminar  
**Units:** 1.0 units    **Hours/Semester:** 16.0-18.0 Lecture hours  
**Method of Grading:** Letter Grade Only
  
2. **COURSE DESIGNATION:**  
**Degree Credit**  
**Transfer credit:** CSU  
**AA/AS Degree Requirements:**  
    CSM - GENERAL EDUCATION REQUIREMENTS: E5d. Career Exploration and Self-Development
  
3. **COURSE DESCRIPTIONS:**  
**Catalog Description:**  
    Investigation of elementary school teaching careers and requirements for earning a California K-5 school teaching credential; study of California Department of Education standards in science for grades K-5; development and teaching class lessons in physical and life sciences. Same as BIOL 126.
  
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
    Upon successful completion of this course, a student will meet the following outcomes:
  1. Describe California Department of Education and Common Core standards in science for elementary school (grades K-5), with specific examples in one grade.
  2. Explain how to approach designing a classroom science lesson for elementary school.
  3. Describe classroom behavior and expectations for elementary school science classes.
  
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
    Upon successful completion of this course, a student will be able to:
  1. Describe California Department of Education and Common Core standards in science for elementary school (grades K-5), with specific examples in one grade.
  2. Explain how to approach designing a classroom science lesson for elementary school,
  3. Describe classroom behavior and expectations for elementary school science classes
  
6. **COURSE CONTENT:**  
**Lecture Content:**
  1. Introduction to course requirements, mentor and student responsibilities
  2. Lecture & internet research on Teaching careers, credential preparation
  3. Lecture and internet research on California Department of Education and Common Core science standards grades K-5
  4. Lecture/discussion on elementary school teaching strategies
  5. Class project: lesson development in physical sciences or life sciences in grades K-5
  6. Students evaluate class lessons, mentor teacher reports
    - A. Student summaries of journals
  
7. **REPRESENTATIVE METHODS OF INSTRUCTION:**  
    Typical methods of instruction may include:
  - A. Discussion
  - B. Field Experience
  - C. Other (Specify): The class is seminar format, with instructor-led discussions and some guest presentations; instructor-directed internet research and discussion by students; informal presentations by students followed by discussions of teaching experiences and results of research into standards; students will report on preparation and delivery of science lessons for the elementary school classroom; students have field experience in mentor K-5 classroom.
  
8. **REPRESENTATIVE ASSIGNMENTS**  
    Representative assignments in this course may include, but are not limited to the following:  
**Writing Assignments:**  
    Students complete a journal with entries after each class meeting and after each visit to K-5 mentor's classroom. Students complete mentor and course evaluations.

**Reading Assignments:**

Students read online sources to prepare presentations on Common Core and State Science standards for K-5 classrooms.

**Other Outside Assignments:**

Students present Common Core background and standards for certain disciplines and grades levels in K-5 classes.

**9. REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

- A. Students will investigate assigned topics and complete written homework assignments (SLO 1); students will keep journals of their classroom experiences; students will write up their lesson plans (SLO 2); mentors will complete student evaluations (SLO 3).

**10. REPRESENTATIVE TEXT(S):**

Other:

- A. Web-based references, including California State Department of Education publications, and materials provided by mentor teachers, will be used in place of a textbook.

**Origination Date:** May 2016

**Curriculum Committee Approval Date:** October 2016

**Effective Term:** Fall 2017

**Course Originator:** Mohsen Janatpour