

College of San Mateo

Course Outline

- New Course
 Update/No change
 Course Revision (Minor)
 Course Revision (Major)

Date: October 27, 2008

Department: Phys

Number: 127

Course Title: Teaching Science II: Middle School Classroom Experience and Seminar Units: 1

Total Semester Hours: Lecture: 16 Lab: Homework: By Arrangement:

Length of Course

- Semester-long
 Short course (Number of weeks ___)
 Open entry/Open exit

Grading

- Letter
 Pass/No Pass
 Grade Option (letter or Pass/No Pass)

1. **Prerequisite** (Attach Enrollment Limitation Validation Form.)

Completion of one college level course in Physics or Chemistry or Biology with C or better grade.

2. **Corequisite** (Attach Enrollment Limitation Validation Form.)

3. **Recommended Preparation** (Attach Enrollment Validation Form.)

4. **Catalog Description** (Include prerequisites/corequisites/recommended preparation.)

Sixteen lecture hours per term plus one hour per week in middle school classroom with a mentor. Investigation of middle school teaching careers and requirements for earning a California middle school teaching credential; study of California Department of Education standards in science for grades 6, 7, 8; development and teaching class lessons in physical and life sciences. Prerequisite: completion of one college course in Physics, Chemistry or Biology with a grade of C or better. Same as Biol 127.

5. **Class Schedule Description** (Include prerequisites/corequisites/recommended preparation.)

Seminar in teaching science to middle school students in California. Investigation of middle school teaching careers and requirements for earning a California middle school teaching credential; study of California Department of Education standards in science for grades 6, 7, 8; development and teaching class lessons in physical and life sciences. 15 hours in middle school classroom with a mentor teacher is required. Prerequisite: completion of one college course in Physics, Chemistry or Biology with a grade of C or better. Same as Physics 127.

6. **Student Learning Outcomes** (Identify 1-6 expected learner outcomes using active verbs.)

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

1-describe California Department of Education standards in science for middle school (grades 6, 7, 8), with specific examples in one grade, 2-explain how to approach designing a classroom science lesson for middle school, 3-describe classroom behavior and expectations for middle school science classes

7. **Course Objectives** (Identify specific teaching objectives detailing course content and activities. *For some courses, the course objectives will be the same as the student learning outcomes. If this is the case, please simply indicate this in this section).*

Same as Student Learning Outcomes

8. **Course Content** (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, you may attach a sample course syllabus with a timeline.)

I. Introduction to course requirements, mentor and student responsibilities

II. Lecture & internet research on Teaching careers, credential preparation

III. Lecture and internet research on California Department of Education science standards grades 6, 7, 8

IV. Lecture on middle school teaching strategies for different learning styles

V. Lecture and workshop: basics behind standards in physical sciences grades 6, 7, 8

Class project: lesson development in physical sciences

Lecture: basics behind standards in life sciences grades 6, 7, 8

Class project: lesson development in life sciences

VI. Students evaluate class lessons, mentor teacher reports

Student summaries of journals

9. **Representative Instructional Methods** (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Include examples of out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills.) **If hours by arrangement are required by this course, indicate the additional instructional activity which will be provided during this time.**

There will be some instructor lectures and some guest presentations; instructor-directed internet research and discussion by students; informal presentations by students followed by discussions of teaching experiences results of research into standards; in workshops led by instructors with mentor teacher participation, students will prepare science lessons for the middle school classroom; students will practice teaching lessons to the class.

10. **Representative Methods of Evaluation** (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

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).

11. **Representative Text Materials** (With few exceptions, texts need to be current. Include publication dates.)

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

Prepared by: _____
(Signature)

Email address: janatpour@smccd.edu

Submission Date: _____