

College of San Mateo
Official Course Outline

1. **COURSE ID:** BIOL 128 **TITLE:** Teaching Science III: High School Classroom Experience and Seminar
Units: 1.0 units **Hours/Semester:** 16.0-18.0 Lecture hours
Method of Grading: Letter Grade Only
Prerequisite: BIOL 127, or PHYS 127

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 high school teaching careers and requirements for earning a California high school teaching credential; study of California Department of Education standards in science for grades 9-12; development and teaching class lessons in physical and life sciences. Same as PHYS 128.

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 high school (grades 9-12), with specific examples in one grade,
 2. explain how to approach designing a classroom science lesson for high school,
 3. describe classroom behavior and expectations for high 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 high school (grades 9-12), with specific examples in one field of science
 2. explain how to approach designing a classroom science lesson for high school,
 3. describe classroom behavior and expectations for high school science classes

6. **COURSE CONTENT:**
Lecture Content:
 - 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 and Common Core science standards grades 9-12

 - IV. Lecture/discussion on high school teaching strategies
 - V. Class project: lesson development in physical sciences or life sciences in grades

 - VI. Students evaluate class lessons, mentor teacher reports
 Student summaries of journals

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**
 Typical methods of instruction may include:
 - A. Directed Study
 - B. Discussion
 - C. Field Experience
 - D. Guest Speakers
 - E. 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's high school 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 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 high school science classrooms.

Other Outside Assignments:

Students present Common Core background and standards for certain disciplines and high school grade levels.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Oral Presentation
- C. Portfolios
- D. Students will investigate assigned topics and give oral presentation to the class (SLO 1); students will keep journals of their classroom experiences and share their experiences with the class (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: October 2015

Curriculum Committee Approval Date: May 2016

Effective Term: Fall 2016

Course Originator: Kathleen Diamond