

Designs for Learning: Secondary Science

Education 416

Section: E100

Term: 2011 Summer

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Wednesday 5:30-9:30pm
EDB 7500B
Burnaby Campus

Discussion Topics: This course will explore the fundamentals of learning and teaching secondary science. The aim of the course is for students to develop a critical and practical philosophy of science education. The course will draw on the literature of science education and field trip experiences to create relevance in the classroom. Students will be expected to engage in reading, writing, dialogue, presentations, the use of digital media and research on a selection of topics which correlate to the BC Science curriculum. Finally, students will continue to develop as reflective practitioners and innovators in science education to promote thinking and inquiry in their classroom.

Course

Objectives:

Students

will develop appropriate models and methods for the learning and teaching of science in both formal and informal educational settings. Students will be able to critically examine the prescribed curriculum and confidently implement it in the science classroom. Students will be able to plan learning and teaching experiences within consistent theoretical frameworks that support growth in science understanding.

Grading:

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15%

Class attendance and participation attendance is mandatory to pass the course.

Grade

will be based on participation in both class sessions/ field trips and online, including preparation for activities, and discussions.

15% Weekly reflections

20% Responses to workshops/readings

20% Individual

Curriculum Planning Unit

30% Group Presentation to class

Required Texts:

Rethinking the Way We Teach Science, Louis B. Rosenblatt, Routledge, 2011, ISBN 978-0-415-87733-3 Some expenses may be incurred for field trips.

Readings

will be provided on dialogue central from a variety of on-line sources and current education journals.

Science

8-10; Physics 11/12; Chemistry 11/12; Biology 11/12; Integrated Resource

Package (IRP). (1996). Ministry of Education, B.C (available on-line: www.bced.gov.bc.ca)

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: EDUC 401/402

Notes:

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Students in all Faculty of Education courses are encouraged to review policies pertaining to academic integrity available on the Undergraduate Programs website:

http://www.educ.sfu.ca/ugradprogs/student_resources/index.html

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