

Designs for Learning: Elementary Science

Education 476

Section: D100

Term: 2014 Summer

Instructor:

Dr. Allan MacKinnon

Email: Allan_MacKinnon@sfu.ca

Office Hours/Location: Please email for an appointment

Thursday 8:30-12:20 pm EDB 7500

Discussion Topics:

This course is intended to provide a comprehensive framework for making sense of the events of curriculum and instruction in elementary school science. It provides an introduction to thinking about science teaching and the practical skills to make science fun and exciting in your classroom. Topics include:

COURSE OBJECTIVES

Using philosophy of science to develop a sound conception of scientific process.

What is the role of human purpose and interest in scientific inquiry?

What programs and materials are available to elementary science teachers?

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How can we interpret what students say and do in the science classroom?

Setting realistic and defensible objectives for science.

Constructing your own science curriculum materials.

Tapping the research on science learning.

Grading: Mini-unit plan or theme study encompassing 6 lessons and rationale with class presentation (45%)

Short (final) paper describing your experiences with science and your thoughts about teaching and professional development in science (45%)

In class participation (10%)

Required Texts:

Inquiry: Thoughts,

Views, and Strategies for the K-5 Classroom. A monograph for professionals in science, mathematics, and technology education

<http://www.nsf.gov/pubs/2000/nsf99148/htmstart.htm>

BC Elementary Science

(K-7) Integrated Resource Package (2005)

http://www.bced.gov.bc.ca/irp/course.php?lang=en&subject=Sciences&course=Science_K_to_7&year=2005

AAAS Benchmarks for Science:

<http://www.project2061.org/publications/bsl/online/index.php?home=true>

Additional readings

and other resources will be distributed online via Canvas.

Recommended Texts:

Designs for Learning: Elementary Science

Materials/Supplies:

Prerequisite/Corequisite: EDUC 401/402

Notes: 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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