

SIMON FRASER UNIVERSITY
SUMMER INTERSESSION 2005

EDUC 476-4
DESIGNS FOR LEARNING: ELEMENTARY SCIENCE
(D04.00)

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location Fort St. John

PREREQUISITE: EDUC 401/402

DESCRIPTION

This course is intended as an introduction to elementary science teaching for pre-service and practicing educators with little or no science education training. The course will have an environmental education emphasis and will model the development of a sense of place and the nurturing of curiosity about things in one's local environment. A weekend field experience is planned at Cameron Lake Outdoor Education Centre.

Proposed Topics:

- The nature of science; the relevance of science
- Personal beliefs about learning and teaching science; current research
- Scientific method; experiments; objectivity
- The discovery approach; the role of playfulness; the teacher as facilitator
- Science-technology-society-education; critical thinking; citizenship
- Integration of environmental education principles across the curriculum: ideas for 'sharing nature with children'; developing awareness and nurturing stewardship; nature journaling; science in the community; field research

Available Resources:

- Design your own inexpensive science tool box
- Funding opportunities
- Materials and programs for teachers
- The great outdoors

Evaluation will be based on:

- Participation - initiative, collaboration, class discussion 20%
- Reflection - on-line responses to readings and session ideas 20%
- Assignments - unit plan design, mini-lesson, group presentations 60%

Required Readings:

There is no assigned textbook for the course. On-line resources will be used.

Proposed Class Dates:

Session 1: Friday, May 6, evening. Saturday, May 7 full day.

Session 2: Friday May 20, evening. Saturday and Sunday May 20, 21 retreat, full days

Session 3: Friday June 3, evening. Saturday June 4 full day.

Reflections and some assignments will be submitted by FirstClass. Students need have access to internet throughout the course.

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