

**SIMON FRASER UNIVERSITY**  
**EDUCATION 476-4**  
**DESIGNS FOR LEARNING: NATURAL SCIENCES (Secondary)**

Regular Summer Semester, 1989  
(May 8 – August 4)  
Thursday  
5:30 – 9:20 p.m.  
Location: MPX 7500F

Instructor: Peter Beckett

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**PREREQUISITE:** Educ. 401/402 or equivalent.

**OBJECTIVES:**

Students will:

- become familiar with the goals, objectives and methodology used to teach Secondary Science in B. C.
- practice a variety of strategies for teaching science.
- develop a variety of strategies to evaluate student understanding.
- plan lessons and units of study consistent with the intent of the B. C. Science curriculum.

**DESCRIPTION:**

This course will concentrate on developing a repertoire of strategies for teaching Secondary Science. Although there will be some reference to the philosophical and psychological basis for current practice in Science Education, the emphasis will be on practical methodology. Topics will include Inquiry and Decision Making; Critical thinking: Research and Reporting; Role Playing; Media Use and Analysis; Field Trips; Lab Exercises; Experimental Design; Process Skills; Computers; Demonstrations; Evaluation and Integrating Science.

**READINGS**

**REQUIRED TEXTS:**

Junior Secondary Science Curriculum Guide Ministry of Education (Victoria)

Science and Technology 11 - Instructional Resources Manual. Ministry of Education (Victoria)

**RECOMMENDED TEXT:**

Morehold and Brandwein. Sourcebook for Biological Sciences. Harcourt Brace Jovanovich. Pub.

**COURSE REQUIREMENTS:**

1. Regular attendance and participation.
2. Completion of assigned readings.
3. Completion of assignments.