

**SIMON FRASER UNIVERSITY
SUMMER SEMESTER 2004**

**EDUC 476-4
DESIGNS FOR LEARNING: ELEMENTARY SCIENCE
(D01.00)**

DR. ALLAN MACKINNON
Office: EDB 8629
Phone: 291-3432

E-mail: amackinn@sfu.ca

TUESDAYS 8:30-12:20 in EDB 7500F

PREREQUISITE: EDUC 401/402

DESCRIPTION

Topics:

- the nature and purpose of science education
- teaching and assessing science through inquiry
- current theoretical perspectives on science learning
- trends in research on science learning and teaching
- demonstrations and experiments
- the role of human purpose and interest in scientific inquiry
- programs and materials available to elementary science teachers
- children's early science learnings through play
- listening to children's ideas in science
- science learning opportunities in the community

Learning Activities:

- teaching children together
- setting realistic and defensible objectives
- designing activities with assessment and evaluation in mind
- justifying the science program
- making science activities and materials
- analyzing and improving science teaching

Assignments:

- 45% group project: mini-unit plan on science theme
- 45% final paper: professional growth plan for science teaching
- 10% participation

Foundations:

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>)

Additional readings will be distributed in class and via email.

Return to Education's Undergraduate 2004-2 Course Outlines Main Page.
