

DESIGNS FOR LEARNING: NATURAL SCIENCES (Elementary)

Intersession, 1988
Wednesday & Friday, 8:30 - 12:20
Location: MPX 7500

Instructor: Elizabeth Kennedy
Telephone: 291-3630

PREREQUISITES: Educ. 401/402

COURSE DESCRIPTION:

The approach taken in this course will be a continuation of one of the themes of your Professional Development Program — the integration of theory and practice. One purpose of this course is to provide pre-service teachers with sufficient background to give them the necessary confidence to teach science in the elementary grades. A second purpose is to provide participants with knowledge to support their advocacy of elementary school science.

MAIN TOPICS

1. The nature of science and science education for tomorrow's world. Why study science? The contexts of science education.
2. Research related to science instruction — children and teaching. The content versus process debate.
3. The B.C. Science Curriculum — goals, objectives and programs (STEM, Exploring Science and Materials Based Programmes).
4. Models and strategies for teaching elementary science. Making the science—technology—society connection.
5. Evaluation of student learning and instructional effectiveness.

Grading will be based upon:

- a) regular attendance and participation in discussions and activities;
- b) two think papers related to readings;
- c) project: (including group planning and individual presentation). The development of a coherent series of lessons around a topic to be presented in class and the development of a related inquiry centre for visiting elementary school children.
- d) final exam (reflection and synthesis).

REQUIRED TEXTS

Science Council of Canada. (1984). Report 36 Science for Every Student. Canadian Government Publishing Centre, Ottawa.

Province of British Columbia Curriculum Guide: Elementary Science Grades 1-7.

Wassermann, Selma & Ivany, J.W. George. (1988). Teaching Elementary Science: Who's Afraid of Spiders. New York: Harper & Rowe Publishers

REFERENCES

- Jacobson, W.J., & Bergman, A.B. (1987). Science for Children: A Book for Teachers. New Jersey: Prentice-Hall Inc.
- Mays, Pamela (1985). Teaching Children Through Environment. London: Hodder & Stoughton.
- Row, Mary Budd. Teaching Science as Continuous Inquiry. McGraw-Hill.