

ENVIRONMENTAL EDUCATION COURSES IN THE SUMMER SESSION: 1973

Simon Fraser's Faculty of Education offers students a unique opportunity to become knowledgeable in the field of Environmental Education. During the month of July two courses in Environmental Education, and two in Ecology will be offered on a total immersion basis in Kamloops, B.C. The two Education courses are:

Education 462-4: Environmental Education; and

Education 486-4: Special Topics: Field Work and Case Studies in Environmental Education (Group 1).

These two courses must be taken concurrently. Both courses will attempt to introduce students to the field of Environmental Education from a broad, interdisciplinary and integrated standpoint. Topics covered will include: Outdoor School and Wilderness Education programs, Urban and Neighbourhood Studies, Environmental Sciences, Environmental Decision Making, Planning, and Information Sources. In addition, all students will be exposed to a variety of field work experiences in the Kamloops region. The emphasis will not be primarily scientific, but will appeal to students whether their background be in Art, Language Arts, Music, Science, or Social Studies. Students will in fact be selected in order to provide a good cross section of different disciplinary backgrounds, experience, and age-grade level taught. Because the courses are total immersion in format, students may not undertake other course work in conjunction with Education 462-4 and 486-4. They are advised to plan an intersession program composed of eight semester hours. Living accommodation for the program is provided at a minimal expense by Kamloops School District. Students may obtain further information by writing to Dr. M. McClaren, C/o Division of Continuing Education, Simon Fraser University. The courses will be team taught by specialists from several fields. NOTE: All Professional Development Program students planning to pre-register for these courses must also complete a questionnaire as well as the pre-registration intent form. The questionnaire is available from Dr. M. McClaren.

In addition to the two Education courses outlined above, two separate programs composed of two Biology courses will be offered during July in Kamloops. These are: Biological Sciences 404-3: Plant Ecology and Biological Sciences 409-3: Field Ecology. Living accommodation for students taking these courses will also be available in Kamloops. Once again, because Biological Sciences 404 and 409 are offered on a total

immersion basis, students may not undertake other work during the summer session. Biology 404 and 409 need not be taken concurrently, but this is advised. Information regarding the program in field ecology and plant ecology may be obtained from the Division of Continuing Education also.

Education 476: Designs for Learning: The Natural Sciences

This course is being offered in two groups, having the same basic core of content, albeit with differing emphases this summer. Group I will emphasize the teaching of Science in the Elementary School, with a particular emphasis on:

1. Inquiry development and evaluation of inquiry skills.
2. Science concepts and skills, and child development.
3. The observation of pupil behaviour.
4. Integration with other parts of the curriculum.
5. Evaluation.
6. Development of instructional objectives.

In addition, the course will provide students with an opportunity for hands-on experiences with science materials appropriate to the Elementary School, and with basic tool skills necessary to developing challenging and exciting learning environments.

The instructor for this course during the May-June inter-session will be Mr. Brian Herrin, Intermediate Consultant, Vancouver School District; former president of the B.C. Science Teachers' Association; and co-author of Insects in the Classroom.

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Group II, taught during the summer session (July-August) will emphasize the teaching of Science in the Junior and Senior Secondary School. The same basic topics will be covered as above, but there will be greater emphasis on the solution of real problems, project methods, curricular alternatives, and the design and development of science programs for Secondary Schools which are suitable to the needs of students and of their communities. The course will also provide an opportunity for hands-on experience in laboratory and field situations.

The instructor for Group II will be Mr. Rod MacVicar, Science Department Head at Centennial Senior Secondary School in Coquitlam, and one of the contributing authors to the laboratory portion of the present Grade 9 and 10 curriculum. Mr. MacVicar has a wide experience in the teaching of Secondary School Science, including the senior Biology and Chemistry programs.

Carried

S.73-56

SIMON FRASER UNIVERSITY

MEMORANDUM

To SENATE

From SENATE COMMITTEE ON UNDERGRADUATE STUDIES

Subject NEW COURSE PROPOSAL - FACULTY OF
EDUCATION - EDUCATION 452-4

Date APRIL 18, 1973

MOTION: "That Senate approve, as set forth in S.73-56,
the new course proposal - Education 452-4 -
Field Work and Case Studies in Environmental
Education."

*Consultation with other Depts
{ only representatives of Dept
not consultation with Dept.*

*difference between
{ Envir Studies
Envi Education
Courses selected not necessarily
those most suited to the course*

S.73-56

SIMON FRASER UNIVERSITY

MEMORANDUM

To SENATE
Subject New Course Proposal - Education
452-4

From Senate Committee on Undergraduate Studies
Date April 18, 1973

On the recommendation of the Faculty of Education, the Senate Committee on Undergraduate Studies has approved the new course proposal for Education 452-4 Field Work and Case Studies in Environmental Education, as set forth in SCUS 73-9, and forwards it to Senate for its consideration.

This submission contains the following information:

- (a) course proposal; and
(b) course outline.

In addition an outline of the existing course, Education 462-4 Environmental Education, has been included to indicate the relationship between these two courses.

This course is designed to supplement Education 462-4 and to provide the practical work required to complete the theoretical studies undertaken in that course. It has formerly been taught as a special topics course within the Faculty of Education and on an experimental basis using the facilities provided by the Kamloops School District. It will be offered on this basis during the present semester and is submitted as a formal course offering in order to regularize the offering of this course and to complete the minor in environmental education, a proposal for which is also being submitted. Resources previously allocated to the offering of this course as a special topics course will continue to be used for this purpose.

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I. Mugridge

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SIMON FRASER UNIVERSITY

MEMORANDUM

SCUS 73-9
(as updated
March 15, 1973)
(as updated Apr 6, 1973)

To FACULTY OF EDUCATION

From UNDERGRADUATE

PROGRAMS COMMITTEE

Subject NEW COURSE PROPOSAL - FACULTY OF
EDUCATION - EDUCATION 452-4

Date February 19, 1973.

Motion:

That the Course Education 452-4,

Field Work and Case Studies in Environmental Education

as described in paper FE. 73 - 9

be approved.

FACULTY OF EDUCATION

New Course Proposal

1. CALENDAR INFORMATION

Program: Environmental Education.

Course Number: Education 452.

Title: Field Work and Case Studies in
Environmental Education.

Sub-title or Description:

This course is intended to provide students who have a conceptual knowledge of environmental education with operational experience under field conditions.

Credit Hours: 4

Vector Description: 2-0-4.

Pre-Requisite(s): Education 462-4: Environmental Education should normally be taken concurrently or as a pre-requisite.

2. ENROLMENT AND SCHEDULING

Estimated Enrolment: 45-50 Maximum/semester of offering.

Semester Offered (e.g. yearly, every Spring, twice yearly, Fall and Spring): Normally every summer semester.

When will first course be offered? Summer 1973 if authorized by senate, otherwise summer semester and/or session 1974.

3. JUSTIFICATION

- a. What is the detailed description of the course including differentiation from lower level courses, from similar courses in the same department, and from courses in other departments in the University?

There is no comparable course at present, either within the Faculty of Education or in the other faculties. Education 452-4

3. JUSTIFICATION: (Cont'd)

is proposed to replace the use of Special Topics and/or Directed Studies courses as a means of providing supervised case work on field study in Environmental Education.

- b. What is the range of topics that may be dealt with in this course?

The course is intended to provide field experience in several areas: residential and day center outdoor education programs, neighbourhood studies, school field travel programs, environmental science and integrated curriculum environmental ed. programs.

- c. How does this course fit the goals of the program?

The course is an essential support course to the historical, conceptual and theoretical framework provided in Education 462-4. It will provide a definite opportunity for the evaluation of competencies under operational conditions.

- d. How does this course affect degree requirements?

It forms part of the special minor requirements in the B. Ed. program for the minor in Environmental Education.

- e. What are the calendar changes necessary to reflect the addition of this course?

The addition of the course title, description, value, vector, and co- and pre-requisites.

- f. What course, if any, is being dropped from the calendar if this course is approved?

None.

- g. What is the nature of student demand for this course?

In the summer of 1971, 25 students took the equivalent as special topics, in 1972, enrolment was limited to 45 and 14 students were turned down, with 7 being sent to UBC where they took Ed. 380-3.

- h. Others for introducing the course.

The semester hour valuation of the Ed. 462/452 combination should make transfer of credit between UBC and SFU more easy.

4. BUDGETARY AND SPACE FACTORS

a. Which faculty will be available to teach this course?

Dr. Milton McClaren. (It should be noted that in the summers of 1971 and 1972 a number of additional resource people from other SFU faculties and from outside have contributed to the program on a team teaching basis. This should continue.)

b. What are the special space and/or equipment requirements for this course?

Normally the course should use a field location. In the summers of 1971 and 1972, the equivalents have used facilities in the Kamloops School District (S.D. # 24). The district has given similar approval for 1973 and other districts have offered facilities.

c. Any other budgetary implications of mounting this course.

Normally a teaching assistant or equivalent funds, plus support for field transportation will be required. In 1971 and 1972, these costs were recovered via offering through Continuing Education as part of the summer session program.

APPROVAL:

Undergraduate Programs Committee
Faculty
SCUS
Senate

Date	Signature
Feb. 19	M. S. O'Connell <i>M.S.O.</i>
Feb. 23	Dr. D. R. Birch <i>DRB</i>

SELECTED REFERENCES

- Dilke, Margaret. 1965. The Purpose and Organization of Field Studies, Vol. I in Field Studies for Schools. Fletcher & Son, Norwich.
- Landin, E. & Rundell, J. 1972. Introducing Environmental Learning on Wildlife Refuges. Minnesota Environmental Sciences Foundation, Minnesota (Golden Valley), 1972.
- McCalren, M. & Ramsey, Margaret. 1973. Outdoor Education in British Columbia. The B.C. Teachers Federation and the B.C. Committee on Outdoor Education.
- Symonds, H. Ed. The Teacher in the City. Methuen Publications. Agincourt, Ontario. 1971.
- Group for Environmental Education. The Yellow Pages of Learning Resources. Published by: The Group for Environmental Education, Philadelphia, PA., 1972.
- Education Facilities Laboratories. Places and Things for Experimental Schools. Educational Facilities Labs. Inc., N.Y. 1972.
- U.N.E.S.C.O. June, 1972. The Declaration on the Human Environment. Prepared for the U.N. Conference on the Human Environment, Stockholm, Sweden, 1972.
- A Deschool Primer. Published by Zephyrus, San Francisco, 1972.

Special Minor in Environmental Education.

The Senate Committee on Undergraduate Studies requested an outline of the proposed new course: Education 452-4, and of the existing course, Education 462-4: Environmental Education, in order that the committee members might examine the proposal for Education 452-4 in the light of the content of Education 462-4.

Education 462-4: Environmental Education

Topic Outline.

I. The Definition of Environmental Education.

Environmental Education is considered as a generic term inclusive of a variety of educational programs related to the study of various aspects of the human environment. Special emphasis is placed upon the main "species" within this genus, namely, Outdoor Education & Wilderness Education, Outdoor Recreation, School Adventure Programs, Environmental Science and Urban Studies.

II. The History of Environmental Education.

The history of Environmental Education is reviewed in the context of ideas about the value of experiences in natural environments for children, as well as the history of educational concepts such as the "Schools Without Walls" concept. The development of the present concept of "Environmental Education" is traced from its origins in Conservation Education and Outdoor Education, and is related to global concern for human ecology.

III. Values and Environmental Education

The consideration of value issues in school programs is reviewed as a concept. The question of why Environmental Education must deal with values is related to present educational controversies over the place of value issues in the curriculum. A brief introduction is given to various schools of thought regarding how schools should deal with topics such as value development and value clarification, with particular emphasis upon how these ideas relate to Environmental Education.

IV. The Child's Perception of his Environment

A review of the relationship between general concepts of Child Development and the child's awareness of his environment. Methods of assessing attitudes and knowledge of the child's environment are reviewed, with examples.

V. The Objectives of Environmental Education

The statements of objectives of Environmental Education published to-date are examined with regard to their treatment of content, concepts, attitudes and values, as well as specific skill acquisition. Students are required to examine the operation of several on-going school programs in the light of this review of stated objectives. Various methods of program evaluation are reviewed in this context.

VI. Curricular Models of Environmental Education.

Environmental Education is reviewed in the context of a specific course approach, and in the context of the "strand" concept in which environmental education is seen as a "theme" woven through the school curriculum. Operational and Educational difficulties associated with each approach are considered. The concept of interdisciplinary curriculum is examined in regard to the scope of Environmental Education. Main curricula in Environmental Education from Canada, the U.S., and Britain, are examined.

VII. The state of Environmental Education programs in Canada, the U.S., and Europe.

Environmental Education programs in Canada, the U.S., and Europe, in particular in Britain, France and Germany are examined and compared. National (and U.N.) policy statements and legislative provisions are reviewed. Curriculum statements now in use in British Columbia are considered with regard to their position on the various aspects of Environmental Education. Financial requirements and budgetary provisions are also discussed.

VIII. Teacher Competencies and Environmental Education.

A review of the demands which Environmental Education programs of various types make upon teachers in terms of their skills and academic preparation. Topics considered are:

Academic background, knowledge of local resources, specific skill requirements, means of acquiring special skills and competencies.

IX. Species of Environmental Education.

Each student is asked to make an in depth study of one form of Environmental Education program and to submit a program outline or design, including objectives, student activities, materials, human resources, funding and other considerations.

Education 452-4: Case Studies and Field Work in Environmental Education.

(Course Outline of Proposed New Course.)

This course is intended to provide students with first hand experience in a variety of different types of Environmental Education programs. It will normally be taken concurrently with Education 462-4: Environmental Education, or Education 462-4 will be prerequisite to it.

TOPICS

I. The Starting Point for Environmental Education in the Public School.

An examination of the school environment in terms of:

(a) Planning, decision making, and design of alternatives. How can students be taught to make decisions regarding their environment. A review of open area and conventional classrooms in the context of the ability of students to manipulate their environments, particularly in the elementary grades. The approach used by the Environmental Studies curriculum group will be examined and applied to specific situations. Students will also visit several different types of classrooms in terms of this topic.

(b) The School as a "Resource-User."

The development of concepts of the use of natural resources will be explored with specific reference to the system presented by a single school. Inputs and outputs will be examined. Approaches to this topic for various grade/age levels will be reviewed. Each student will be asked to develop a plan for a program appropriate to the grade/age level which he wishes to teach, using the Educational Facilities Laboratories report "Places for Environmental Education," as a basis for his plan. Where possible, this section of the course will be conducted in a conventional public school setting.

(c) Neighbourhood Studies and Local Issues.

Very often Environmental Education is presented in terms of large scale global environmental problems, with little attention being paid to the day-to-day immediate environment of the student. Hence, approaches to Environmental Education which focus on the local environment of the student will be reviewed; with emphasis on different educational strategies. Topics considered will include:

(i) Means of assessing the pupil's concept of his "neighbourhood."

- (ii) Field work in and around the school; parks, shopping centers, streets, local history, local architecture, sources of material and information. (Emphasis on the use of material from VEEP. (The Vancouver Environmental Education Project). Where possible students will undertake field projects with class groups in local schools, or will work from a school setting.

II. Urban Studies in the Context of Environmental Education.

In this section of the course we will attempt to offset the notion that Environmental Education deals only with wilderness locations, i.e. that Outdoor Education and Environmental Education are fully synonymous. Curricula dealing with urban studies area reviewed, including the Urban Studies section of the Vancouver Environmental Education Project, the Teacher and the City project, and the De-School Primer materials on Urban Studies. Sources of Urban Studies materials will be reviewed and sample materials will be examined. The Greater Vancouver Regional District's Environmental Education Task force will be examined. Laboratory studies will emphasize field work in urban places and the range of activities available to students at various age/grade levels. The urban environment will also be examined from the perspective of various sections of the curriculum: language arts, science, social studies, art, music, etc.

III. Outdoor Education.

This section of the course will examine on-going school programs in outdoor education in British Columbia. The main variants considered will be: day centre and residential programs. Topics will include: site availability and selection, transportation, interdisciplinary approaches to outdoor education, example programs (Paradise Valley, McQueen Lake, etc.) Where possible this section of the course will include actual experience at a school district Outdoor Education site. The problems of residential program operation will be reviewed and each student will be asked to design a one-week residential outdoor education program.

IV. Environmental Sciences and Environmental Studies: The Outcomes of Environmental Education.

This section of the course will pay particular attention to the teaching of ecological concepts in the secondary school curriculum. Students will examine newly developed

IV. Continued/....

provincially approved course options, including the Environmental Sciences option, the revised Biology 11-12 program, and the Forestry Sciences program.

Students will visit secondary school programs, such as the Squamish Refuge and Environmental Sciences program. Examples of school-community environmental projects, such as the Batchelor Hills program in Kamloops, will be reviewed. The secondary school curriculum will be reviewed in terms of opportunities for curricular integration, and the implications of strategies such as team teaching to environmental education.

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This course is being offered in two groups, having the same basic core of content, albeit with differing emphases this summer. Group I will emphasize the teaching of Science in the Elementary School, with a particular emphasis on:

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SIMON FRASER UNIVERSITY

MEMORANDUM

To DR. M. S. O'CONNELL.

From DR. M. McCLELLAN

Subject TEACHING ASSIGNMENTS.

Date OCT. 2, 1972.

I'M GOING TO SEND YOU A DETAILED PROPOSAL RE. THE KAMLOOPS SUMMER INSTITUTE IN ENVIRONMENTAL ED. THIS WEEK. ITS BASIC FORMAT WILL BE:

"CORE" PROGRAM { EDUC. 462-4: ENVIRON. EDUC. EDUC. 486-4: SPEC. TOPICS

(FIELD STUDIES IN ENVIRONMENTAL EDUCATION).

"ADVANCED" PROG.

EDUC. 492-4: DIRECTED STUDY: (CASE STUDIES IN ENVIRONMENTAL TOYDOOR REVELATION) + Bi Sc. 409-3: FIELD ECOLOGY.

OR

GEOG: RESOURCES COURSE.

ALL WILL BE OFFERED FOR FOUR WEEKS, TOTAL IMMERSION BEGINNING.

WILL SEND YOU DETAILED DESCRIPTIONS. THIS WEEK.

JULY 9, 1973

NOTE INCREASE IN LENGTH.

(M)