

**YORK UNIVERSITY
FACULTY OF ENVIRONMENTAL STUDIES**

**PROPOSAL FOR JOINT PROGRAM IN ECOSYSTEM MANAGEMENT
BETWEEN SIR SANDFORD FLEMING COLLEGE AND
THE UNDERGRADUATE PROGRAM IN ENVIRONMENTAL STUDIES
AT YORK UNIVERSITY**

Introduction

The Faculty of Environmental Studies at York University (FES) proposes to create a new Joint Program in Ecosystem Management with Sir Sandford Fleming College of Applied Arts and Technology (SSFC). The new Program would allow York students, after successful completion of 3 years in the Bachelor in Environmental Studies (BES) Program, to complete the Ecosystem Management Technologist Program at SSFC in 2 years which is normally requires 3 years. Upon successful completion of 2 years at SSFC, students would be awarded a Technologist Diploma and an Honours BES degree. Similarly, graduates of SSFC's Ecosystem Management Program would be eligible to apply to the BES Program and work towards a 4 year B.E.S. degree in 2 years at York. The benefit of the Joint Program to SSFC and York students is that they will enhance their education and obtain both an Honours degree and a Technologist Diploma in 5 years rather than 7.

Objectives

The Joint Program in Ecosystem Management recognizes the need for broader training in certain environmental areas than either York or SSFC offers alone. It combines two complementary programs, one primarily social science and the other primarily technical and field oriented, thus enhancing the education of

students as well as their ability to find jobs. It responds to FES student's understandable concern for enhanced opportunities in applied and technical training while confirming York's commitment to the values of a broader education. This Program also ensures that qualified SSFC students will benefit from further education at FES.

It recognizes that the two arms of the provincial post-secondary education system enjoy unique, but complementary, strengths and that there is little point in trying to duplicate each other's strong points. Rather, by sharing facilities, and co-operating in curriculum design, we can greatly enhance the educational opportunities available to students currently enrolled in both kinds of institutions and avoid duplication and competition. York's strengths in Ecosystem Management lie in our broad approaches to understanding policy and management, and the social, economic, legal and political nature of environmental issues. SSFC strengths are in the hands-on, technical areas associated with managing aquatic and terrestrial ecosystems. The Joint Program thus provides a broader education than either institution can mount alone emphasizing field and laboratory skills as well as skills in critical analysis, issue analysis, effective management and problem solving, and independent and team work. An additional objective of the Program is to bolster enrolment in both institutions.

Similarity to Programs at York

The FES portion of the Joint Program is not new and has been offered in its entirety since 1994/95. The SSFC portion of the Program is also distinct and does not resemble any programs currently offered at York, although a small number of courses overlap to some extent with courses in FES, Geography and Biology. There are too few relevant courses in Biology and Geography at York to constitute an Ecosystem Management Program. The Ecosystem Management Program at SSFC is very applied in nature and is quite different from the more theoretical Environmental Science Program at York. Furthermore, the

Environmental Science program is an Honours degree and is not available to FES students as a major/minor subject. The SSFC program is also resource-rich and would be exceedingly difficult for York to match at this time.

Implementation

How will the Joint Program work in practice? York students who have completed 60 credits towards their B.E.S. degree and expect to complete 90 credits with a minimum GPA of 5 before enrolling at SSFC may apply to the joint advisory committee in the fall of the third year. Upon receiving confirmation as having met the requirements of the Joint Program Technologist diploma in Ecosystem Management from Sir Sandford College, they will be awarded 30 transfer credits towards their BES degree.

Similarly, SSFC Technologist students who expect to successfully complete the requirements for the Technologist diploma with a 'B' average or better in their last year can apply to the joint advisory committee for advanced standing in the BES Program. Successful applicants will be awarded 60 credits towards a BES degree and can then work towards successful completion of an Honours BES degree within two years. Note that in the College system, students who successfully complete a 2-year Technician program may apply for and enroll in the 1-year post-Technician program, called the Technologist program. At SSFC, typically only 33% of the Technician graduates in Ecosystem Management go on to complete the Technologist diploma; these students are considered among the better suited to the university environment.

According to the Council of Ontario Universities, a university degree involving a partner institution should consist of at least 40% of university-level courses. The proposed Joint Program meets that minimum with students taking 50 to 75% of their courses at York.

Examples are given below to illustrate how a York student pursuing a Bachelor's degree and a SSFC student admitted to the BES Program are expected to proceed while at York. The rationale for course selection is that students are expected to take the normal suite of required courses with the exception of the 3rd year Methods course which is a prerequisite for the Honours thesis. The examples below are subject to future changes that may be made to the BES program.

Courses common to both FES and SSFC Programs are subject to the following: York students take them to prepare for their 2 years at SSFC while they are degree credit exclusions for SSFC students coming to York.

Students enrolling first at York will take the following courses:

Year 1

ENVS 1000 6.0 Approaches to Environmental Studies
ENVS 1200 6.0 BES Workshop
ENVS 1500 6.0 Introduction to Science in Environmental Studies
(students may take BIOL 1010 6.0 or GEOG 140 6.0 instead if they have OACs or equivalents in both chemistry and biology),
Humanities (6 credits),
Electives (6 credits: COSC 1520 3.0 or 1540 3.0 recommended).

Year 2

ENVS 2500 6.0 Applied Environmental Sciences
ENVS 2000 3.0 Paradigms in Environmental Studies
ENVS 2010 6.0 Methods in Environmental Studies I
ENVS 2100 3.0 Foundations in Nature, Technology, and Society
ENVS 2400 3.0 Foundations in Environmental Policy and Action
BIOL 2050 3.0 Ecology
Electives (6 credits).

Year 3

ENVS 3000 3.0 Environmental Ethics
9 credits at the 3000 level
18 credits of BES courses at the 4000 level

Years 4 and 5 at SSFC

Table 1 presents the 3 year SSFC curriculum which is undergoing review and subject to change. Students typically take 7 courses per semester. The following courses are suggested, with variations depending on individual student electives taken at York:

Fall 1

1030079 Mapping and Geographic Systems
1200152 Earth Sciences (hydrology and geomorphology)
1130081 Fish and Wildlife Biology
1450018 Restoration Ecology
1450019 Aquatic Ecosystems
Options

Winter 1

1450021 Introduction to Ecosystem Management
1160168 Trees and Shrubs of Ontario, Resource Inventory
1130098 Fish and Wildlife Principles and Practice
1450003 Ecosystem Monitoring and Assessment
1450020 Terrestrial Ecosystems
Winter Camp

Fall 2

1130080 Habitat Assessment
1450022 Urban Ecosystems
1190050 Introduction to GIS (Vector)
Fall Camp
1110507 Credit Placement I
Options

Winter 2

1450008 Biodiversity and Sustainability of Ecosystems
1170035 Urban and Regional Planning
Corporate Sustainable Development
1190055 Applications of GIS in Natural Resources
First Nations and Sustainable Development
Joint Program Colloquium

Students enrolling at York after completing the 2-year Technician and 1-year Technologist Programs at Sir Sandford Fleming College will take the following:

Year I (Fall/Winter)

ENVS 1000 6.0 Approaches to Environmental Studies
ENVS 2000 3.0 Paradigms in Environmental Studies
Humanities (6 credits)
ENVS 2100 3.0 Foundations of Nature, Technology and Society or ENVS
2300 3.0 Foundations of Global Development, Peace and Justice
Electives (9 to 12 credits depending on whether Foundation courses are taken).

Year 2 (Fall)

ENVS 3000 3.0 Environmental Ethics
ENVS 2200 3.0 Foundations of Human Settlements and Population or
ENVS 2400 3.0 Foundations of Environmental Policy and Action
9 to 12 credits in FES at the 3000 or 4000 level, depending on whether
Foundation courses are taken.

Year 2 (Winter)

15 credits in FES at the 3000 and 4000 level.
[Note: At least 18 credits (6 half courses) shall be at the 4000 level. This includes the Joint Program Colloquium]

Degree credit exclusions for SSFC Technologist students:

SSFC students are exempted from required courses ENVS 1500 6.0, ENVS 2010 6.0, ENVS 2500 6.0 because these are courses which familiarize students with science and statistics and are geared for students who do not have a background in these areas. These courses would be redundant for SSFC students. SSFC students are also exempted from ENVS 1200 because the main purpose of the course is to do hands-on work and to develop a focus in the BES Program, which college students are considered to have already developed. Degree credit exclusions may apply to ENVS 3520 3.0 (GIS), ENVS 3521 3.0 (Remote Sensing), ENVS 4442 3.0 (Environmental Monitoring), ENVS 4520 3.0 (GIS Applications), depending on what courses students have taken at SSFC. York Students who have taken ENVS 3520 and ENVS 3521 while in the BES Program will be exempted from the introductory course in GIS at SSFC (1030097), and will take an elective course instead.

Graduation from York

All students in the Joint Program will participate in a colloquium before graduation from York. The format and timing of this colloquium will be discussed and designed by the York Undergraduate Program Director and the SSFC Coordinator, and it is understood that it will be taken as a credit course.

Implications

What are the financial and administrative consequences of this proposal? The creation of the Joint Program will not have any direct bearing on finances as no exchange of resources nor additional expenditures are required. While York will lose fees paid by BES students for 1 year, it will gain fees paid by SSFC students for 2 years. Each institution will be entitled to full fees for all courses taken. In the long run each institution will be well served financially by having an attractive mix of academic programs to offer students.

BES students normally take 24 to 48 credits outside of FES excluding general education requirements during a 4-year program. In the Program outlined above, students intending to go to SSFC will take 27 credits outside of FES at York in 3 years. SSFC students enrolled in the BES program will take 6 to 9 credits outside FES in their 2 years at York.

In administrative terms, York and SSFC will have to cooperate to facilitate recruitment and admission of students to the Joint Program. York and SSFC faculty should arrange to visit each other's campus annually to conduct information sessions. Links will also have to be forged between the York FES Student Programs Office and SSFC in order to facilitate the transmission of student records for those applying to the Joint Program and for their B.E.S. degree. We will also have to ensure that Advising Processes fully inform students about the requirements of the Joint Program and help them to put together a suitable schedule each year.

SSFC and the Faculty of Environmental Studies would like to introduce this Program for the 2000/01 academic year. We will announce the Joint Program in Ecosystem Management to our students beginning in the spring of 2000, with the proviso that the Joint Program is contingent upon approval of both institutions if that has not yet occurred.

ENABLING LEGISLATION

MOVED that the Faculty of Environmental Studies proceed to introduce a Joint Program in Ecosystem Management with Sir Sandford Fleming College.

MOVED that students who have completed at least 90 credits towards their B.E.S. degree at York with a minimum GPA of 5, and have been admitted to and pursued the Joint Program in good standing, and who are confirmed as having met the requirements of the Technologist diploma in Ecosystem Management from Sir Sandford Fleming College, will be awarded 30 transfer credits towards their B.E.S. degree.

MOVED that students who have completed the Technologist diploma in Ecosystem Management from Sir Sandford Fleming College with an average of 'B' or better, and who have been admitted to the Joint Program in Ecosystem Management at York University, be awarded 60 advanced standing credits towards their B.E.S. degree.

MOVED that York University and Sir Sandford Fleming College recognize students who have successfully completed the requirements of the Joint Program in Ecosystem Management on their respective transcripts.

MOVED that the Joint Program be reviewed during its fourth year of operation by a Joint Committee with a minimum of 2 representatives from each institution. York's representatives will include the Undergraduate Program Director and a

senior administrator from the Student programs Office. This review should include but not be limited to the collection and analysis of information on the backgrounds of students pursuing the Program, the patterns of course selections, their academic performance and enrolment patterns.

These motions require corresponding approvals from Sir Sandford Fleming College.