

A: Division: **INSTRUCTIONAL** Date: **OCTOBER 1998**
 B: Faculty: **HUMANITIES & SOCIAL SCIENCES** New Course: **X**
 Department: **ENVIRONMENTAL STUDIES** Revision of Course Information form:
 Program: **HABITAT RESTORATION PROGRAM**

C: ENVS 204 D: SPECIAL TOPICS E: 3
 Subject & Course No. Descriptive Title Semester Credit

F: Calendar Description: This course allows a student, under the supervision of an instructor to carry out an independent guided program of study in a habitat restoration project. The projects may include the application of field skills, community stewardship, biophysical habitat inventory, mapping and database design.	Summary of Revisions: Enter sections) Eg: Section C,E,F
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G: Type of instruction: Hrs. per Week / 14 Weeks per Semester

Lecture:	Hrs.
Laboratory:	Hrs.
Seminar:	Hrs.
Clinical Experience:	Hrs.
Field Experience:	Hrs.
Practicum:	Hrs.
Shop:	Hrs.
Studio:	Hrs.
Student Directed Learning:	Hrs.
Other (Specify):	Hrs.
Guided Study:	4 Hrs.
Total:	4 Hrs.

H: Course Prerequisites:
ENVS 102, ENVS 200

I: Course Corequisites:
NONE



J: Course for which this Course is a Prerequisite:
NONE

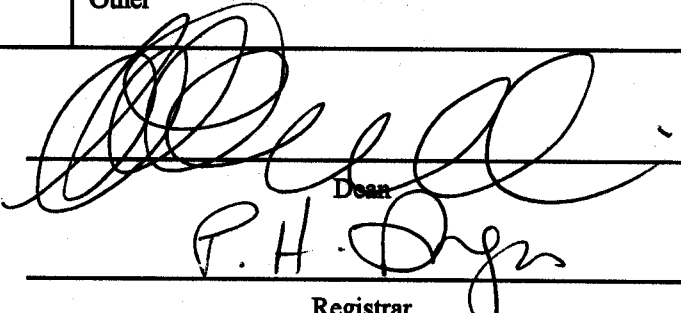
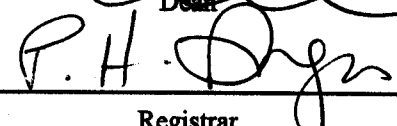
K: Maximum Class Size:
35

L: College Credit Transfer X
 College Credit Non-Transfer
 Non-Credit

M: Transfer Credit: Requested: X
 Granted:

Specify Course Equivalents or Unassigned Credit as appropriate: (as per current B.C. Transfer Guide)
 SFU
 UBC
 UVIC
 Other


 Course Designer(s)

 Department Chair


 Dean

 Registrar

Subject and Course Number

N. Textbooks and Materials to be Purchased by Students (Use Bibliographic Form):

Readings and books on reserve in Library. Examples of readings:

Gregory, S.V., F.J. Swanson, W.A. McKee, and K.W. Cummins, 1991. "An Ecosystem Perspective of Riparian Zones: Focus on Links Between Land and Water." Bioscience 41" 540-551.

Land Development Guidelines for the Protection of Aquatic Habitat (Dept. of Fisheries and Oceans and Ministry of Environment, Lands and Parks), 1992.

Quadra Planning Consultants Ltd., 1997. Urban Stream Protection, Restoration and Stewardship in the Pacific Northwest: Are We Achieving Desired Results? Workshop Proceedings, March 10-12 1997, New Westminster, BC. Prepared for Department of Fisheries and Oceans and Ministry of Environment, Lands and Parks.

Rogowski, A.S., 1996. "GIS Modelling of Recharge on Watershed Plans." Journal of Environmental Quality, 25: 463-474.

Schueler, T. R., 1996. "Crafting Better Urban Watershed Plans." Watershed Protection Techniques, Volume 1, pp. 329-337.

Forest Practices Code of B.C.

RIC Standards for Stream and Wildlife Inventories.

Complete Form with Entries Under the Following Headings: O. Course Objectives; P. Course Content; Q. Method of Instruction; R. Course Evaluation

O. COURSE OBJECTIVES

Upon completion of this course, the student should be able to:

1. Plan out a habitat restoration project.
2. Apply field skills in habitat restoration, e.g., traverse, water/soil sampling.
3. Conduct a preliminary biophysical habitat inventory, e.g., flora and fauna identification, habitat classification.
4. Identify community stewardship opportunities and knowledge of local groups.
5. Demonstrate a knowledge of local watershed issues relating to habitat restoration.
6. Apply mapping techniques to a habitat restoration project or biophysical inventory.
7. Organize special events, e.g., habitat restoration symposiums, workshops.
8. Know how to set up and maintain a database of flora/fauna, stakeholders, government agencies, etc.
9. Identify stakeholders (public, NGO, government, corporate) involved in watershed and habitat restoration planning and programs.

P. COURSE CONTENT

Each student, in consultation with the instructor, will identify a topic of interest to them and be expected to carry out a program of learning with the instructor (2 hours/week) and a combination of readings, research and field work (2 hours/week).

1. **Developing a Habitat Restoration Project**
 - a) **Planning**
 - b) **Identifying stakeholders and community partners**
 - c) **Methodology**
 - d) **Implementation**
 - e) **Monitoring /follow-up**

2. **Field Techniques for Habitat Restoration**
 - a) **Biophysical inventory**
 - b) **Stream/riparian zone mapping**
 - c) **Flora/fauna identification**
 - d) **Habitat classification**
 - e) **Soil sampling/site preparation**

3. **Identifying Watershed Issues**
 - a) **Library searches**
 - b) **Literature review**
 - c) **Interviews with key stakeholders**
 - d) **Presentations to government agencies, community organizations**

5. **Mapping Techniques**
 - a) **Locating and retrieving maps**
 - b) **Air photo interpretation**
 - c) **Using GIS to map biophysical features**

6. **Database design and maintenance**
 - a) **Objectives and types of databases - numerical, text**
 - b) **Database software**
 - c) **Setting up a database**
 - d) **Maintaining a database**

7. **Project Management**
 - a) **Organizational skills - setting priorities**
 - b) **Maintaining a project management schedule**
 - c) **Project management software**

Q. METHOD OF INSTRUCTION

This course will employ several instructional methods to accomplish its objectives, including some of the following:

1. One-on-one meetings with instructor
2. Small group discussions
3. Audio/visual presentations
4. Individual and group projects
5. Guest speakers
6. Seminar presentations

R. COURSE EVALUATION

The instructor will present a written course outline with specific evaluation criteria at the beginning of the semester. Evaluation will be carried out in accordance with Douglas College policy and will be based on some of the following:

1. A major project with a value of 30%
2. Short assignments with a combined value of up to 50%
3. Exams with a combined value of 50%
4. Field skills tests with a value up to 30%
5. An individual or group presentation with a value up to 20%

An example of one possible evaluation scheme would be:

Major project	30%
Short assignments	20%
Field skills test	20%
Presentations	10%
Final Exam	20%