Douglas College

EFFECTIVE: SEPTEMBER 2007

CURRICULUM GUIDELINES

A.	Division:	**Education**	Effective Date:	**September 2007**
B.	Department / Program			

M: Course Objectives / Learning Outcomes

14. Field techniques
    14.1. Soil analysis
    14.2. Plant/animal identification
    14.3. Quadrat/belt transect analysis
    14.4. Lake/stream analysis
    14.5. Intertidal sampling

DOUGLAS COLLEGE SIGNATURE ELEMENTS:

Core Competencies:

a. Oral, written and interpersonal communication:
In-class assignments, term papers and all examinations in this course will include writing. Term projects will include an oral presentation. Students will work collaboratively in groups on term projects, lab and field activities and classroom assignments.

b. Computational and Information Technology
Students will use computer technology for all research activities associated with term projects, laboratory and field activities and reading assignments. Computer analysis of field collected data will be done for all field exercises.

c. Critical and Creative Thinking
Critical thinking will be essential in analysis of ecological questions in class, lab and field activities, and in term projects.

d. Teamwork
Students will work in groups on in-class analysis of ecological problems, discussion of literature papers, collection of analysis of lab and field-collected data.

Academic Signature:

a. Applied Skills (field, laboratory practicum)
Students will learn a wide range of laboratory and field skills typical of ecological investigation.

b. Ethical behaviour and social responsibility
Discussion of ethics and social responsibility will occur regarding many issues in the course including the social responsibility of scientists, the impacts of humans on ecological systems and human-induced loss of biological diversity.

c. Intercultural, International and Global Perspective
Many issues in the course have a global perspective as all biological organisms are subject to evolutionary change. Many ecological examples will be presented from numerous countries and parts of the world.

O: Methods of Instruction

This course involves 4 hours per week of classroom instruction and four hours per week of laboratory activity or field trip. Classroom work will include lectures and tutorials, and is integrated with textbook and scientific journal readings. Field trips and laboratory activities complement and enhance understanding of the theory content of the course.

P: Textbooks and Materials to be Purchased by Students

Smith, R.L. & Smith, T.M. (2001) Ecology & Field Biology, Sixth Edition.
Benjamin Cummings, Pearson Education, Newmarket, Ontario, Canada
OR
Ricklefs, R.E. (2001) The Economy of Nature, Fifth Edition.
W.H. Freeman and Company Publishers, New York, NY, USA
OR
A current ecology text, as specified by the instructor will be required.