



BRITISH COLUMBIA
INSTITUTE OF TECHNOLOGY

Course Outline

School of Construction & the Environment
Program: Bachelor of Technology in Ecological Restoration

Course Number: RENR 8103
Course Name: Applied Conservation Biology

Prerequisites:

RENR 8001 Population & Community Ecology
RENR 7100 Principles of Ecological Restoration

Course is a prerequisite for:

Hours/Week:	4	Lecture:	2	Lab:	2	Total Hours:	60	Level:	Degree
				Total Weeks:	15	Credits:	4		

Course Description:

Conservation biology is the science of biology that looks at human impacts on biological diversity and possible means to prevent extinction of native species. Topics to be covered in this course include: principles of conservation biology and biological diversity, biological diversity of British Columbia, value of biological diversity, threats to biological diversity, invasive species management, climate change and its impacts on ecosystems and biodiversity, species at risk, habitat loss and fragmentation, island biogeography theory, and the species area relationship as it relates to biodiversity conservation and the design and planning of protected areas.

Course Learning Outcomes

At the end of this course the student will be able to:

1. Analyze and communicate the scientific basis and historical context of conservation, and the principles and tools available for addressing conservation issues.
2. Apply conservation biology principles to the research and preparation of recovery plans for species at risk.
3. Apply conservation biology principles to the design and planning of parks and protected areas.
4. Apply the Canadian Species at Risk Act (SARA) and associated legislation.
5. Compile species at risk reports.

6. Prescribe invasive species management plans for various species and habitats in BC for conservation purposes.
7. Critically evaluate the current literature in conservation biology.
8. Justify to the general public the need to conserve biological diversity, considering potential change needed in individual behaviour and public policy.
9. Design and implement an outreach activity to convey the significance of conservation issues to a non-science target audience (general or school children [K-12]).

Evaluation

Midterm Exam	25 %	Comments: Assignments will include case study analysis, a seminar and an outreach presentation.
Assignments	40 %	
Final Exam	35 %	
Total	100 %	

Text(s) and Equipment:

Required:

Primack, R.B. 2004. The Essentials of Conservation Biology. 3rd ed. Sinauer Associates.

Recommended:

Course Record:

Developed by:	Daniel J. Catt, M.Sc. RP Bio	Date:	August, 2006
	Authoring Instructor		