



HAIDA GWAI  
HIGHER EDUCATION SOCIETY

**Rainforest Ecology & Management**

HGSE 353

**\*\* THIS IS A SAMPLE SYLLABUS, GUESTS, FIELD TRIPS AND OTHER COURSE DETAILS MAY VARY FROM YEAR TO YEAR. Contact HGHE for more details.**

Instructors:	Dr. Andy MacKinnon
Credits:	3

**Course Description:**

This course is an introduction to the ecology and management of the forested and non-forested ecosystems of Haida Gwaii.

The ecosystems of Haida Gwaii are part of the coastal temperate rainforest biome. We'll begin with an overview of the ecology of coastal temperate rainforests, and a review of the different forested and non-forested ecosystems of Haida Gwaii. We'll study the structure and composition of these rainforest ecosystems, and the disturbances – natural and anthropogenic – that shape them. We'll detail differences between old-growth and second-growth forests, and consider what this might mean for species, communities, and ecosystem processes (e.g., nutrient cycling). How do Haida Gwaii's rainforests respond to different types and intensities of disturbance? What are the implications for forest management in the coastal temperate rainforest? In this course we will address these questions by learning about, exploring, and collecting data in a variety of forested ecosystems across a range of successional stages.

**Course Objectives:**

By the end of this course, students will be able to:

- Understand the major biotic and abiotic factors that affect structure, composition and function of coastal temperate rainforests and Haida Gwaii's forests, specifically.
- Participate in field observations, data collection, data interpretation and analysis, and oral and written presentations.
- Appreciate the cultural context of forests.

**Course Organization:**

The course is built around lectures and in-class discussion with related lab and field exercises. Field exercises will tend to build on each other. One assignment per week will be written up in addition to a final field project.



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**Assignments & Evaluation:**

The grade for the course will be based on the following percentages:

Field Exercise Report	15%
Paper (literature) Review	15%
Field Trip Report	20%
Final Project	35%
Course Participation	15%

**Class Readings**

There is no class textbook. Instead, two papers will be assigned to everyone to read each of the first two weeks.

**Field Exercise Report**

Class field activities will involve measurement of forest stand structure and composition. Students will complete 1 report requiring field data collection, data analysis, and critical interpretation and discussion of these data.

**Paper (literature) Review**

Students will write one paper review over the first two weeks of the course. We will assign papers on early in week 1. You should examine each paper carefully before choosing which to review.

**Field Trip Report**

Students will write a report addressing questions provided for consideration during one of three field trips: Forestry and Fisheries, Cultural Values, or Forest Management.

**Final Project**

Students, working in groups of 4 or more, will conduct field projects at the Anvil Trail site based on a subject related to forest ecology. The projects will compare different elements (e.g., vegetation, stand structure) between old-growth and second-growth forests. Projects involve literature review, experimental design, field sampling, data analysis, report preparation, and oral presentation.

**Course Participation**

Students are expected to participate actively in class discussions, field trips, and field activities.



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**Course Schedule:**

*Please remember that our schedule is fluid and subject to change, as are start and end times for field trip days.*

Day	9-12	1-4
Monday	<b>Lecture:</b> Intro to the course, course expectations <b>Lecture:</b> What is a tree, what is a forest?	<b>Lecture:</b> Vegetation environment, physical landscape
Tuesday	<b>Field trip:</b> Forestry and fisheries on Haida Gwaii with guest	
Wednesday	<b>Field activity:</b> Describing ecosystems at Gore Brook	
Thursday	<b>Field trip:</b> Cultural forest features with guest	
Friday	<b>Lecture:</b> HGSE 350 Seminar	Independent Study
Monday	<b>Field activity:</b> Old growth and second growth forest along the Anvil Trail	
Tuesday	<b>Field trip:</b> Forest management on Haida Gwaii with guests	
Wednesday	<b>In class:</b> Final project consultations	
Thursday	<b>In class:</b> Final project field sampling (Anvil Trail)	
Friday & Saturday	Gwaii Haanas!	
Monday	Easter Monday – No Class	
Tuesday	<b>In class:</b> Final project preparation	
Wednesday	<b>In class:</b> Final project preparation	
Thursday	Final project presentations	Final project reports due 10 pm
Friday	<b>Lecture:</b> HGSE 350 Seminar	Independent Study