AGROECOLOGY/FORESTRY 444 – AGROFORESTRY

PRINCIPLES OF INTEGRATING FOOD, FORESTRY, AND CONSERVATION
OBJECTIVES IN LAND USE

Sessions: Thursday 2:00-5:00
Room FSC 1002
Dr. Tom Sullivan

Field Projects: As scheduled
Room 180B MacMillan
Phone: 604-822-6873
E-mail: tomsu@interchange.ubc.ca
Office hours: W 1:00 – 3:00 (or by app’t)

Timetable:
1. September 9
Theme: INTRODUCTION
2. September 16
Theme: PRISTINE FORESTS OR AGROFORESTS?
Discussion: Human activities, nature, and agroforestry
3. September 23
Theme: TEMPERATE ZONE AGROFORESTRY
Discussion: Food, forests, and human ecology
4. September 30
Theme: SILVOPASTURE
Discussion: Cattle, forests, and conservation
5. October 7
Theme: RESTORATION ECOLOGY
Discussion: Passive or active restoration?
6. October 14
Theme: TROPICAL HOME GARDENS
Discussion: Traditional home gardens: sustainability and conservation?
7. October 21
Theme: COFFEE AGROFORESTS
Discussion: Economics and conservation in coffee agroforests
8. October 28
Theme: SOCIOLOGY AND AGROFORESTRY
Discussion: Sociology and the future of agroforestry and conservation
9. November 4
Theme: NON-TIMBER FOREST PRODUCTS
Discussion: Impacts of harvesting non-timber forest products?

November 11
REMEMBRANCE DAY

10. November 18
Theme: SOIL CONSERVATION IN NEPAL
Seminars: Field Project 3

11. November 25
Theme: FIRST NATIONS’ PERSPECTIVES AND ETHNOBOTANY
Seminars: Field Project 3

12. December 2
Theme: AGROFORESTRY CASE STUDY IN MEXICO
Seminars: Field Project 3
COURSE OUTLINE

1) Themes and Discussions

Themes are designed to be a dialogue with students to promote class discussion. They are integral to the field projects and reports. There will be one theme per week (1 hour) followed by a discussion (1.5 hours) based on 2 or 3 readings. Students will guide discussion sessions by way of leading questions derived from the reading materials. The final 0.5 hour per week, in the first half of the term, will be for discussion of field projects: tutorial sessions covering data collection, analysis, and report preparation.

2) Field Projects and Reports

There will be three field projects: a weekend field trip (September 24-26) to Summerland and Kelowna in the Okanagan Valley where we will visit each study area for projects 1 and 2; and a 1-day field trip to UBC Farm for project 3 (October 2 or 3):

FIELD PROJECT 1 – Silvopasture Systems: Cattle, Trees, Forage, and Habitat Management for Rare Species
FIELD PROJECT 2 – Integrated Riparian Management: Agroforestry and Restoration Ecology
FIELD PROJECT 3 – Design of Agroforestry Systems at UBC Farm

These field exercises are class projects which will generate various datasets (some large datasets will also be available) that will form the basis of the report preparation. These data are to be analyzed and written up as a report by each student with the following format:

Abstract or Summary
Introduction
Materials and Methods
Results
Discussion
Management Implications
Literature Cited
Tables
List of Figures
Figures

This format is for a scientific paper or detailed technical report. There are no page limits but 15-20 pages (typed, double-spaced) would probably be an average length. Students may work in groups or individually, but each student prepares a report. All references must come from credible sources: peer-reviewed scientific journals and in some cases, reports by government agencies. Each of the three reports and one seminar make up the grade for the course. There are no exams.
It is important that reports be completed according to the following schedule so that students can receive some feedback on their report writing during the term rather than handing in all the reports at term end:

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<thead>
<tr>
<th>Report</th>
<th>Due Date</th>
<th>Grade</th>
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<td>1</td>
<td>October</td>
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 Seminar | 10% |
          | 100% |

3) **Group Presentations – Field Project 3**

In the latter part of the term, each group for Field Project 3 (UBC Farm) will present a seminar (50 minutes and 10 minutes for questions). Each group should prepare a 1-page summary of their presentation for distribution to the class (audience).

**LEARNING OUTCOMES**

1) Discuss the significance of combining forest- and agro-ecosystems into agroforestry systems to meet socioeconomic and conservation goals.
2) Understand where agroforestry fits within the restoration efforts needed to mitigate ecological damage from unsustainable land use practices.
3) Develop an awareness of local and global opportunities for agroforestry initiatives.
4) Improve critical thinking about issues and problems.
5) Develop an understanding of how scientific research is used to solve problems and provide objective input into management decisions.
6) Prepare detailed scientific/technical reports on data, literature reviews, and experience generated from field projects.
7) Conduct an independent study, or review, of an agroforestry problem and prepare an oral report, as part of a group.
8) Develop a vision of where agroforestry might fit with respect to sustainability of land use practices.

**Course Literature**


