Course Description and Purpose:
The purpose of this course is to make students of environmental studies, food studies and other natural resources disciplines familiar with the major types of sustainable agroforestry systems used by people in both developed and developing countries, and to inform them about the ecological benefits they provide to humans, plants, animals, and the environment. It also considers the major critiques of the limits and potential romanticism of agroforestry. This course aims to educate students interested in the interaction of biophysical, social, political and economic issues underlying the adoption and application of world agroforestry systems. The lectures emphasize the basic components and concepts of cognate subjects of agroforestry and human-environment relations. Assigned readings add training in analyzing complex social and ecological systems and specific applications such as nut-tree crop combinations, forest farming, carbon farming, and notions of climate change mitigation and adaption.

This course can contribute to the Natural and Social Sciences components of the UO core requirements. It focuses on the interplay between the science of sustainable agriculture (or agroecology), forestry, environmental issues, and livestock husbandry with the cultural, social and economic aspects of communities to improve agricultural productivity while protecting the environment. Critical thinking is encouraged through class-discussions, assigned readings and writing of Rhetorical Précis, midterm examination questions, and a final research paper.

Course Learning Objectives:
. To be able to identify and explain the various social and ecological agroforestry concepts and techniques used worldwide.
. To understand the interactions between farming communities, cultural and agricultural systems, crops, livestock and trees for food, nutrients, water, and how to minimize competition between these critical resources.
. To analyze the connections between this course and other environmental courses.
. To develop the ability of students to think critically about environmental issues and practices associated with social agroforestry, domestically and globally.
. To enable each student to investigate in depth at least one agroforestry issue or practice and learn to find feasible solutions to current environmentally related problems.
. To identify different land-use systems, characterize economic and socio-cultural qualities.

Course Requirements:
Class discussions and debates on social, environmental benefits and misunderstandings about the concepts and classification of this progressively recognized land-use discipline.

**Lectures, Readings, Videos, and Field trips:** There will be approximately an hour-long lecture per day. The syllabus includes daily assigned readings. For each class session, 2 articles are designated, and copies of assigned readings or Internet links to readings are available on Canvas. Relevant videos will be shown in class, and students will be asked to write reports on *some* of them. Three (3) Field trips to farms applying some sort of agroforestry systems in the area will be organized.

Short reflections (of one article per week) using the Rhetorical Précis (RP) format are due at the beginning of class, once a week *only* via Canvas. Everyone is expected to read all assigned articles on the class list, and write a RP of the selected article, the one with an asterisk (*) for the week. RPs together with other assignments will only be accepted via Canvas. The RP is a formally structured abstract of the content and context of a written work. It treats articles as a form of active discourse between the author and the reader. Students are highly discouraged to copy the assigned articles’ abstracts for submission. More description about the Précis format, including an example can be found in Canvas. Plus, there will be 4 quizzes (short answers questions from lectures/readings) during the term.

**Field Trips:** There are three required field trips. Students are expected to participate in all field trips and write a report on them. Students who cannot participate in those field trips must make alternative arrangements with the instructor by the first days of class.

**Team Presentations:** (10% of Course Grade) will be given on Week 10. Group formations, tips and rubric will be available to students later in the course (see Syllabus).

**Attendance and Participation**
Please come to class prepared to participate in highly interactive and organized round-table discussions, small group work, question and answer sessions. And if you need to be absent for health reasons and/or family emergencies, let me know beforehand. Roll will be taken.

**Final Term Paper:** A short scholarly paper (4-5 p) is required due at the final. Please see instructions for term paper rubric posted on Canvas.

**Grades scale:**
- Attendance and Class Participation: 10%
- 1 Midterm Exam (short questions examination) = 30%
- Rhetorical Précis (10) and Quizzes (4) = 25%
- Field trips, Videos reports and Oral Presentations = 20%
- 1 Research-based term paper including Proposals = 15%

**Students Learning Outcomes:** At the end of the term, I’d want students to understand, and be able to describe the subject matter fluently, learning it through critical analysis discussions, midterm, quizzes, group presentations, and final term paper.
. Identify the five major types of sustainable agroforestry concepts (i.e. silvopastures, alley-cropping, riparian buffers, forest farming, and windbreaks), critics, socioeconomic and environmental benefits associated with them.
. Consider the biological, socio-cultural and environmental factors when designing or evaluating sustainable agroforestry systems.
. Understand the complex human-environment interactions of food, trees, and culture

**Studying for Examinations:**
Examinations will be of the “short answers, essay” type. Successful answers to exam questions will include information drawn from lecture materials, assigned readings, field trips, videos, etc.

**Methods of Instruction:**
The class will be organized so that students are sitting in circles to allow open-discussion and active engagement among themselves and the instructor, to converse about the readings, lectures, short videos, and other class activities. This class offers a socioecological, and political arena for students to engage in collegial, animated, and learned discourses.

**Academic Dishonesty and Student Conduct:**
The course conforms to the University of Oregon Administrative Rules related to Student Conduct. Please respect your fellow students by not exhibiting disruptive behavior. More expectations for student conduct can be found at [https://uodos.uoregon.edu/StudentConductandCommunityStandards.aspx](https://uodos.uoregon.edu/StudentConductandCommunityStandards.aspx)

**Course Outline:**

**Syllabus and Assigned Readings:** This course uses a set of assigned readings rather than a published textbook. The set of assigned articles was selected to give a broad view of community sustainable agroforestry systems, including both specific technology along with the social, cultural, economic, and biological context in which it operates.

**Week 1: Defining Indigenous Sustainable Agroforestry, Land Use Issues, and Biomes Classification**

26 Sept. **Introduction to the course; Definition and History of Agroforestry**  
Extra readings: Godsey- article from AFTA

28 Sept. **Biomes: Classification and description; Major Land uses Issues; Indigenous Agroforestry: Tropical Forest Swidden Systems and Impacts.**

Week 2: Classification of Sustainable Agroforestry: Basic Concepts and Practices

3 Oct. Types of Agroforestry in America and Europe: Analysis of Alley Cropping, Sylvopastoral, and Agroforests (i.e. coffee), Windbreaks, Riparian buffers, etc.


Olea, L., & Ayanz, S.M. 2006. The Spanish Dehesa. A traditional Mediterranean silvopastoral system linking production and nature conservation growing, Badajoz, Spain (Opening paper)


5 Oct. Types of Indigenous Agroforestry Systems in Africa and Asia: Homegardens, Parklands, Intercropping, Rotational Tree Fallows, Agroforests (i.e. coffee), etc.


Week 3: Indigenous Sustainable Agroforestry and Environmental Services

10 Oct. Field Trip I @ Aprovecho, Cottage Grove

12 Oct. Ecological Interactions and productivity: Nutrient Cycling; SOM; Effects of Trees on Soils: Biological Nitrogen Fixation


Week 4: Social and Cultural Basis of Indigenous Sustainable Agroforestry

17 Oct. Soil Fertility and Productivity: Soil Conservation and Biodiversity

19 Oct. **Social-Cultural Aspects and Adoption of Agroforestry; Division of Labor and Tenure Systems**


**Week 5: Agroforestry and Cultural beliefs systems**

24 Oct. **Land Tenure and Society: Meanings and cultures, Class and Gender Issues**

dl.nsf.ac.lk/bitstream/handle/1/8189/TARE-9-53.pdf?sequence=2

26 Oct. **Midterm Exam (No assigned readings)**

**Week 6: Food Security and Sustainable Agroforestry**

31 Oct. **Field Trip 2 @ PROUT, Eugene**

2 Nov. **Tree Crops: Food Security and Livelihood Resilience**

**Assigned Readings**: (*) Assah, E. et al. 2011. Trees, agroforestry and multifunctional agriculture in Cameroun; [http://www.tandfonline.com/loi/tags20](http://www.tandfonline.com/loi/tags20)

**Week 7: Food and Agroforestry Systems: Agrobiodiversity**
7 Nov: Food and Agroforestry Systems: Agrobiodiversity

9 Nov: Field Trip 3 @Youth Farm, Springfield

Week 8: Sustainable Agroforestry and Climate Change Impacts: Carbon Farming

14 Nov: Economic Basis for Sustainable Agroforestry: Cost & Benefit Analysis

16 Nov: Sustainable Agroforestry and Climate Change in the Americas and Europe

Week 9: Future of Global Sustainable Agroforestry Systems and Scaling-Up

21 Nov: Indigenous Agroforestry and Climate Change in Africa and Asia: Carbon Sequestration

23 Nov: Future of Sustainable Agroforestry Systems: Constraints to Sustainable Agroforestry Adoption

**Week 10: Group Presentations**

**28 Nov. First Session**

**30 Nov. Second Session**


**FINAL Research-based Paper due**

**Some interesting web sites:**
Oregon Small Farms Site - [http://smallfarms.oregonstate.edu/](http://smallfarms.oregonstate.edu/)
UO Urban Farm Site - [https://blogs.uoregon.edu/urbanfarm/](https://blogs.uoregon.edu/urbanfarm/)
World Agroforestry Center (formerly ICRAF) - [http://www.worldagroforestry.org/](http://www.worldagroforestry.org/)
USDA National Agroforestry Center - [http://www.unl.edu/nac](http://www.unl.edu/nac)
Association for Temperate Agroforestry - [http://www.aftraweb.org/](http://www.aftraweb.org/)
The Overstory- Agroforestry.net - [http://agroforestry.net/](http://agroforestry.net/)
California Hardwood Page - [http://danr.ucop.edu/ihrmp/](http://danr.ucop.edu/ihrmp/)
University of Missouri Agroforestry Center - [http://www.centerforagroforestry.org/](http://www.centerforagroforestry.org/)
<table>
<thead>
<tr>
<th>Dates</th>
<th>Lecture Topic</th>
<th>Readings</th>
<th>Assignments</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Week 1: 9/26</td>
<td>Course Intro., Def. &amp; History of AFS</td>
<td>Eichhorn et al, 2006; Fifanou et al., 2011</td>
<td>Rhetorical Précis # 1 due</td>
<td>Writing RP; Prezi; Concept Map; Think-Pair(s)-Share</td>
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<td>9/28</td>
<td>Biomes Classification &amp; Description; Major Land Uses; Ind. AFS</td>
<td>* Miller &amp; Nair, 2006; Steinberg, 1998</td>
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<td>Minute Paper; Response Prompts; Op’ed Questions</td>
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<td>Week 2: 10/3</td>
<td>Classification of AFS; Basic Concepts and Practices: America and Europe</td>
<td>Gold et al., 2009; Olea et al., 2006</td>
<td>Quiz #1</td>
<td>Collaborative Reading; Discussion Debate: 3-2-1; Short videos (Dehesa, etc.)</td>
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<td>10/5</td>
<td>Types of Agroforestry Systems in Africa and Asia</td>
<td>Kumar, 2006; * Soini, 2005</td>
<td>Rhetorical Précis #2 due</td>
<td>Minute Paper; Plus/Delta; Debrief Teams</td>
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<td>Week 3: 10/10</td>
<td>Field Trip 1</td>
<td>No readings</td>
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<td>Field Trip #1: Aprovecho</td>
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<td>10/12</td>
<td>Ecological Interactions and Productivity</td>
<td>Rizvi, 1999; (*) Jose et al., 2004</td>
<td>Rhetorical Précis #3 due</td>
<td>Discussion Debate: 3-2-1; Item Clarification</td>
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<td>Week 4: 10/17</td>
<td>Soil fertility and Productivity in AFS</td>
<td>Schwab et al., 2015; Rosenstock et al., 2014</td>
<td>Field trip report #1 due</td>
<td>Guest Lect.: Dr. Galen</td>
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<td>10/19</td>
<td>Social and Cultural Basis of ISAFS</td>
<td>* Rocheleau, 1997; Galvan, 2004</td>
<td>Rhetorical Précis # 4 due</td>
<td>Guess Lect.: Dr. Galvan</td>
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<td>Week 5: 10/24</td>
<td>Land Tenure, Gender and Cultural Beliefs Systems</td>
<td>Fairhead &amp; Leach, 1997; * Kiptot et al., 2014</td>
<td>Rhetorical Précis #5 due</td>
<td>Discussion Debate: 3-2-1;</td>
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<td>10/26</td>
<td>Midterm Exam</td>
<td>No assigned readings</td>
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<td>Videos and/or Team Presentations meet; tips and rubric</td>
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<td>Week 6: 10/31</td>
<td>Field Trip 2</td>
<td>Young, A. 1988</td>
<td>Field Trip #2: PROUT</td>
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<td>11/2</td>
<td>Food Security &amp; AFS: Tree Crops</td>
<td>Assah et al., 2011</td>
<td>Quiz # 2 Rhetorical Précis #6 due</td>
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<td>Food Security &amp; AFS: Tree Crops</td>
<td>MacFall et al., 2015</td>
<td>Field trip report #2 due</td>
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<td>Food Security &amp; AFS: Tree Crops</td>
<td>Frank, P. 2012</td>
<td>Rhetorical Précis #7 due</td>
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<td>Field Trip 3</td>
<td>* Frank, P. 2012</td>
<td>Field Trip #3: Youth Farm</td>
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<td>Economic Basis for AFS: Cost-Benefit-Analysis</td>
<td>Gram et al., 2001; Pilz &amp; Molina, 2002</td>
<td>Proposals due; Quiz # 3 Rhetorical Précis #8 due</td>
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<td>Agroforestry &amp; Climate Change: Americas &amp; Europe</td>
<td>Sharrow, 2004; Brenda, 2007</td>
<td>Discussion: Believing &amp; Doubting”</td>
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<td>Future of Global Sustainable AFS and Scaling-Up</td>
<td>Jose et al., 2012; Boeckman, 2007</td>
<td>D. Debate: 3-2-1; Guest lect.: Gavin or Bart</td>
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<td>Group Presentations: 1st Session</td>
<td>Oluyede, 2012</td>
<td>Academic Controversy; Believing &amp; Doubting”; Video (Savory)</td>
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<td>Group Presentations: 2nd Session</td>
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<td>Open-ended questions; Top Ten List”</td>
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<td>Final Research Paper Due</td>
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<td>Team Presentations</td>
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