

	EARTH UNIVERSITY	
	COURSE SYLLABUS	
Name of the Course: Making Agriculture Sustainable: Understanding Challenges and Finding Solutions		Course code: CUL501
Number of credits: 3		
Quarter: 2		Year: 2019
Name(s) of the Professor(s): Jorge Arce Portuguez		
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COURSE DESCRIPTION

This course provides an overview of sustainability, focusing on the impact that agricultural systems have on the environment, society and economy. In this course we will look at several systems, their positive and negative aspects, trying to give students enough tools for them to judge the way forward.

Agricultural systems, whether organic or conventional, are nowadays not considered the best way to produce food. Sustainable should be a good mix of both systems. However, how do we decide when a system is sustainable? 5-10 years from now? What do we do in the mean time? Do we change the system in the process? Those are questions we don't have a right or wrong answer for. This course will give students enough information to develop criteria on them so that everyone has an answer to the question: What makes an agricultural system sustainable?

COURSE OBJECTIVE

Students will learn about alternative production strategies that promote sustainable growth and environmental protection.

SPECIFIC OBJECTIVES OF THE COURSE

At the end of the course, students should be able to:

1. Articulate a personal vision of Sustainability
2. Comprehend the impact of modern agriculture on society and the environment.

3. Experience and learn about sustainable development practices in Costa Rica.
4. Propose and describe different strategies to promote sustainable development on farms.
5. Reflect on their participation and engagement in agricultural production activities.
6. Reflect on certain aspects of Latin American culture they will have experienced during the course.

CONTENTS OF THE COURSE (Include: class program, dates, subjects or topics, descriptions, reading materials per subject. Please designate what chapters and/or sections of the readings must be read per subject).

Week 1: Introduction to Sustainability and interaction between environment, economy and society, as well as contemporary challenges in actually implementing sustainable approaches. Students will learn about selected sustainable practices, such as integral Waste Management and Environmental Certification. In addition, students will visit different farms and will learn to evaluate practices in the context of the overall sustainability of the production system.

Week 2: *Tropical Forest Carbon Management: Tools for Protecting Rain Forests and Mitigating Climate Change.*

Students will learn about small scale agriculture and the environmental and social impacts in the community. Students will be immersed in Spanish as they spend time in these communities.

Students will learn about alternative agricultural systems and their impact on the environment and the communities. Students will visit EARTH's "La Flor" campus in the Northwestern region of Costa Rica.

ACTIVITIES

- a. Visits on EARTH's main campus in Guácimo and La Flor EARTH's campus in Guanacaste; farms: banana, rice, mango, pineapple, vegetables; organic farms, and nearby communities.
- b. Assignments: Weekly reports, classroom and field activities, as well as oral presentations.

METHODOLOGY

This two week course includes activities in which students will explore ways to improve human welfare, increase productivity as well as reduce environmental impacts. It is designed for people interested in learning about the principles of sustainability and strategies to promote it. Students will be exposed and become familiar with a variety of tropical agro ecosystems and will spend part of the course interacting with EARTH students and faculty. Additionally, they will have the opportunity to visit and interact with nearby communities and to learn about the challenges they face.

LEARNING ASSESSMENTS (EVALUATION)

Class discussion	25
Field trips Participation	20
Community Participation	15
Weekly report	20
Oral Presentation	20
Total	100%

CLASS PROJECT

A class project and readings are required in order to comprehend the concept of sustainability.

FIELD TRIP

- a. Visits on EARTH's main campus in Guácimo and La Flor EARTH's campus in Guanacaste; farms: banana, rice, mango, pineapple, vegetables; organic farms, and nearby communities.
- b. Assignments: Weekly report, classroom and field activities, oral presentation.

RELEVANT POLICIES (NORMS) FOR THE DEVELOPMENT OF THE COURSE

- Course is ruled by the norms, policies, responsibilities and academic procedures established by EARTH University.
- Attending to the planned activities for this course program are obligatory. In consequence, the student is responsible for assisting and be on time according to the pre-established schedule.
- Arriving late will be considered as an un-justified absence, and it is up to the professor's criteria to allow or not the student participation.
- Use of mobile devices and any other electronic devices is prohibit at the classroom, unless the professor allows it.
- Being professional, formal, respectful with your classmates, faculty, as well being proactive and be a self-learner is a really important asset for this course.

BIBLIOGRAPHY

1. “Our Common Future: Report of the World Commission on Environment and Development”. UN Documents. n.d. Web. Retrieved 27 June 2013. < <http://www.un-documents.net/ocf-02.htm>>
2. United Nations General Assembly “48. Sustainable development: managing and protecting our common environment “2005 World Summit Outcome. 24 October 2005. Web. Retrieved 27 June 2013. < <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N05/487/60/PDF/N0548760.pdf?OpenElement>>
3. IGBP (International Geosphere-Biosphere Programme) (2001), Global Change and the Earth System: A planet under pressure. The Global Environmental Programmes. Edited by Will Steffen and Peter Tyson. Stockholm: IGBP, IGBP Science Series No. 4, 32pp (available at <http://www.igbp.kva.se/cgi-bin/php/frameset.php>).
4. United Nations (TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT). <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
5. United Nations Framework Convention on Climate Change. (CLIMATE CHANGE: IMPACTS, VULNERABILITIES AND ADAPTATION IN DEVELOPING COUNTRIES). <https://unfccc.int/resource/docs/publications/impacts.pdf>