



Sustainability and Conservation in Costa Rica

LE-803

4 credits

Updated Autumn 2022

I- Course Content

Based on theory and field experiences, this course explores how different actors in Costa Rican society (state, rural communities, indigenous organizations, cooperatives, NGOs, activists) attempt to achieve long-term sustainability. The course will study policies and practices which focus on protection and restoration of tropical ecosystems, climate change adaptation and the enablement of local communities to develop economically in the present while envisioning a more eco-friendly future. The syllabus also analyses Costa Rica's deepest paradox: behind its reputation and extraordinary credentials as an environmentally conscious nation, there are many unsolved social-environmental issues. Already, more than 95 percent of Costa Rican energy is produced from renewable sources, and its forest cover now stands at more than half part of its territory, after having reverted decades of deforestation. This biodiversity-hotspot nation has also adopted one of the most consistent and ambitious plans to achieve a zero net emissions economy by 2050, in line with the Paris Climate Change Agreement. On the other hand, Costa Rica faces many social-environmental challenges. Particularly, the overuse of agrochemicals in agriculture, which is among the highest in the continent, creates a serious public health problem in rural areas. In addition, the increasing population in urban areas causes garbage, sewage and wastewater pollution, while the transport system is highly dependent on fuel energy. This contradictory background places Costa Rica as the perfect laboratory to learn about sustainability possibilities and challenges in modern societies while exploring its impressive biodiversity and getting immersed in its pluricultural society.

II- Learning outcome

Students will get insight into Costa Rican economical activities, conservation history and political dynamics in order to better visualize how several human societies and cultures relate to nature. The student will be able to discuss and explain some of the most important socio-ecological challenges for Costa Rican societies in the present. Students should be able to present, describe and analyze the topics covered in lectures and syllabus. The syllabus has been selected to help students actively understand the complex interplay between environmental, social, and economic factors in different settings around Costa Rica. Students who satisfactorily complete this course will be able to analyze and discuss concepts such as:

- Resilience, conservation and restoration of tropical ecosystems
- Agroforestry and sustainable agro-ecological production in the tropics
- Elementary knowledge of tropical animals, plants and other living organisms
- Sustainable ecotourism and rural community-based tourism
- Environmental policies in Costa Rican history
- Sustainable and alternative energy production
- Decarbonization, carbon sequestration and carbon footprint reduction
- Climate change mitigation and adaptation
- Community-based sustainable development
- Women empowerment and sustainability
- Traditional ecological knowledge and indigenous people

III- Teaching

The course is divided into two sections. The first section consists of a self-study period (4 weeks). The second section consists of a teaching period in Costa Rica (16 weeks) with obligatory attendance to lectures, seminars and several academic day excursions and one overnight field trip.

Self-study section. This part of the course aims to provide a broad overview over fundamental topics for understanding Costa Rican agrarian past and deforestation history. Students must read three selected chapters from the course book and submit a reflection text based on this reading.

Study at campus in San Isidro, Costa Rica. This section includes two seminars, fourteen lectures, several day excursions, and one overnight field trip (four nights). Students must participate both in lectures, in the day excursions and in the overnight field trip (4 reports) and attend at least 80% of all teaching activities in order to qualify to take the final exam. Students will get a study guide with the detailed program each semester.

IV- Evaluation

Exams and other submissions must be written in English.

Group work based on overnight field trip participation	10%
Academic day excursions report	30%
Academic field trip report (Overnight field trip)	20%
Final Exam	40%

Evaluation scale:

90 - 100%	A	Excellent
80 - 89 %	B	Good
70 - 79%	C	Fair
Less than 70%		Failed

Self-study reflection text

The specific instructions and reflection questions are found in the self-study guide document. The reflection text must be an individual work written either in Spanish or English. Submission deadline and other submission details: Look at the self-study guide document. The self-study reflection text is a compulsory activity and must be approved.

Academic day excursions

Students will write a report on three different communities/ projects we will be visiting. These communities have different biocultural backgrounds (migrants, indigenous, women from rural areas and landless peasants). These visits will allow us to better understand the cultural dimension of sustainability and development in rural areas in the tropics. Prior to these visits, we will issue in a seminar how to best write an academic field trip report. More instructions are found in the study guide document.

Overnight field trip

The overnight field trip (four nights) combines a practical and theoretical approach. Students will stay in a rural village which has some special local policies on economy, land tenure and conservation. Despite the several social-environmental threats this small community faces, local leaders attempt to achieve sustainable development by incentivizing the preservation and restoration of forests, while promoting economic growth and social welfare of its population through cooperativism, agro-ecological practices and rural community-based tourism. There are several academic goals for this trip. First, students will study the extraordinary biocultural diversity in this area. Among other activities, several guided walks and workshops will be organized in order to explore the tropical rainforest and learn how to conduct small-scale farming making use of agroecological and agroforestry methods in tropical ecosystems. All these learning activities will provide a ground to understand how small communities can diversify livelihoods and enhance resilience by being better prepared to anticipate and adapt to natural disasters, economic shocks and climate change. Students will complete a group work and write a report based on this experience.

Final exam

During the final seminar students will get instruction and guidance about the final exam. In this 2 days take-home exam, students will answer two general questions that cover the learning outcomes for this course. Date: Last week of the course. (Detailed instructions can be found in the study guide document).

V- Syllabus

Course book

Fletcher, R., Dowd-Urbe, B., & Aistara, G. A. (Eds.). (2020). *The Ecolaboratory: Environmental Governance and Economic Development in Costa Rica*. University of Arizona Press. <https://doi.org/10.2307/j.ctvxw3pvp>

Available as an e-book at [this link](#)

Other readings

There will be some additional articles to read. The detailed reading list schedule will be updated each semester.