

Program offering course	SUSTAINABLE DEVELOPMENT & RENEWABLE ENERGIES	
Course name	ENVIRONMENTAL AND POLITICAL CHALLENGES FOR A SUSTAINABLE FUTURE	
Course code	ENVI303/SUM	
Areas of interest	Sociology, Political Science, Communication, Philosophy, Anthropology, History, Gender Studies, Intercultural Studies, Social Communication, Leadership, Social Service, Health, International Relations, Business, Sustainability and Development.	

Language of instruction	Spanish
U.S. Semester Credits	4
Contact Hours	45
Term	Summer 2020
Course meeting times	TBD
Course meeting place	FLACSO Argentina
Professor	Leandro Hernán Gomez
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Office address	Tucumán 1966 CABA
Office hours	TBD

Course Description

This course focuses on the environmental and political challenges that the global community is facing today. Based on environmental, political and business approaches, the course seeks to provide students with a thorough understanding of the main global environmental concerns, its repercussions at global and local levels, and the challenges to reach a sustainable future.

The course explores four interconnected axes: a) the interplay between human beings and the environment b) the political arena; c) contemporary environmental concerns and challenges d) energy sources and their importance to reach a sustainable development.





- a) Human-environment interplay: We will explore theoretical and conceptual frameworks for the understanding of this complex relation. Concepts and theories as tragedy of the commons, globalization, adaptation capability, sustainable development, buen vivir and de-growth will be discussed.
- b) Political arena: Policymaking process of multilateral environmental agreements, scope
- and limitations of the agreements, stakeholders involvement and tensions between actors will be addressed. In addition, local policies and their relationship to international agreements will be explored. This axis seeks to provide students with tools for a political analysis of the environmental challenges presented over the course.
 - c) Environmental concerns and challenges: Climate change, water scarcity, land sustainability, and waste management will be addressed. Conceptual and practical debates around these topics will be analyzed, stakeholders and interests at stake will be identified, and policies and instruments to tackle these complex challenges will be assessed. Through the study of regional (Latin-American) and local cases, students will reach a critical thinking of the environmental, social and economic dynamics of the topics.
 - d) Energy sources: The global energy matrix and renewable energies are the core topics of this axis. It seeks to provide students with a thorough understanding of the consequences of a global energy matrix based on fossil fuels, and the role of renewable energies to move to a greener energy system. Additionally, the Argentine case will be presented, and students will be able to analyze the local debate between the exploitation of unconventional hydrocarbons and the promotion of renewable energies.

The main goal of the course is that students acquire a critical thinking about the environmental situation at present, and the challenges for a future sustainable development.

Students Learning Outcomes

By completing this course, students will be able to:

- Explain the complex human-environment interplay and identify patterns of production and consumption.
- Get a thorough understanding of the policymaking processes at a global and local level and the connection between both levels, as well as its implementation by public and private stakeholders.
- Analyze central environmental concerns faced today (such as climate change, water scarcity, land sustainability, and waste management), and identify its negative consequences.
- Understand the effects of a global energy matrix based on fossil fuels, and the role of renewable energies to move to a greener energy system.
- Critically assess the challenges to reach a sustainable development, and elaborate recommendations to overcome them.





Course Prerequisites NONE

Class Dynamics

The course has an interdisciplinary perspective that includes knowledge from political, environmental and business sciences. It will be taught using lectures, presentations and videos. Regular classes will starts with icebreaker questions, followed by a presentation of the topic by the professor, and then a closing group exercise. This dynamic method will enable students to understand the theoretical concepts and implement the acquire knowledge on class exercises and required assessments.

Guest speakers and site visits will combine the perspective from different stakeholders: government, business and civil society.

Assessment and Final Grade

Midterm Exam	20%
Essay	25%
Group research	20%
Presentation	15%
Participation	20%
TOTAL	100 %

Course Requirements

Attendance and Class participation

Students are required to attend classes prepared to discuss the assigned readings

Midterm Exam

At the end of the first part of the course, students will take a midterm exam that assesses both the level of readings follow-up and the understanding of the issues at discussion.

The exam will contain 3 instructions from which students will have to choose and answer 2 of it. Their answers should be based on the readings discussed and the contents provided in class.





Essay

Each student will have to select one of the topics presented during the second part of the course (e.g. climate change in Latin America, water scarcity), and elaborate an essay. It should be written representing the position of one of the stakeholders involved in the topic selected. The essay have to: 1) analyze the topic; 2) identify the concerns of the stakeholder selected; and 3) include recommendations to tackle those concerns.

This assignment should be between 2000 and 2500 words.

It will enable students to implement the concepts assessed on class and critically think the stakeholders' interests at stake on the topic of their preference.

Group research

Organized in small groups students will carry out a group research project. The topic of the assessment will be selected by the students between the topics gained on the third part of the course (e.g. fracking in Argentina, renewable energies).

It will include four instructions: 1) introduce the topic selected; 2) map out the actors involved; 3) analyze social and environmental aspects of the topic; and 4) include recommendations to minimize negative impacts

The paper should be between 2500 and 3000 words.

Students will be able to gain research skills, integrate contents and analyze in depth the case studied.

Presentation

Each student will present his/her final reflections about the environmental and political challenges studied, by PowerPoint. They are expected to: 1) reflect on the environment degradation; 2) suggest social and political changes for a sustainable management of natural resources; 3) identify new practices to implement –at personal level- to tackle his/her environmental concerns.

Presentations is required to be submitted and it should be no longer than 15 minutes in length.

Weekly Schedule

WEEK 1

Class 1 Presentation and overview of the contents

Presentation of the professor and the students. Overview of the syllabus, contents of the course, co-curricular activities, guest speakers, methods





of instruction and assessments. In addition, the professor will introduce the main concepts to be analyzed in the second week.

Readings:

Gudynas, E. (2010).

Class 1.2 Environmental crisis and sustainability.

This module introduces students in human-environment interactions, analyzing different manners to relate to the environment and their consequences. The instructor will present the relationship between production/consumption and the environment.

Concepts as tragedy of the commons, globalization, adaptation capability, sustainable development, buen vivir and degrowth will be discussed.

Readings:

Gudynas, E. (2004). pp. 47-66.

Alberto, A. (2014).

Class 1.3 International political sphere.

This session adderesses the political arena at a global level. The instructor will analyze the policymaking process of the multilateral environmental agreements, recognize the stakeholders involved (states and non-states actors), and identify the principles and characteristics of global environmental policies. Students will be able to understand the scope and limitations of the agreements, and the tensions between actors.

Readings

UNEP. (2007).

Class 1.4 Local policies and instruments.

This class explains how international environmental agreements translate into local policies, to then present local environmental rights and law. Local instruments for green policies will be discussed (e.g. R&D, ecolabel, tariff and green taxes).

Readings

Sabsay, D. & Ryan, D. (2014).

WEEK 2



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Class 2.1 Mid-term exam

Students will take a midterm exam in class. It will assess the level of readings follow-up and the understanding of the topics presented in the first part of the course.

Midterm Exam due

Class 2.2 Circular economy: Visit to Coca Cola Argentina production plant.

The business sector is an implementer of green policies because of different reasons: binding legislation, new business opportunities, to reduce costs, consumers' preferences, and/or ethics and ideological position.

In this line, the concept of circular economy is shaped with the goal of reducing the externalities of production and consumption processes. Several companies address this new economic model as a double opportunity, for the environment and for business.

Students will be able to identify first-hand the implementation of the circular economy model as well as other green instruments.

Media resource

El Cronista. (2018).

Class 2.3 Dealing with the climate crisis in Latin America

Climate crisis and it impacts in Latin America as a vulnerable region. Climate change is a global phenomenon which main driver is human activity. Due to the characteristics of this phenomenon, it needs to be addressed by global and local strategies. However, the impacts of climate change are not equal over all the societies.

This session discusses the causes and effects of climate change with a focus on the Latin America region, and adaptation and mitigation strategies to reduce its negative effects.

Readings

IPCC. (2018). pp 6-25.





Media resource

BBC. (2019).

Class 2.4 Climate change and the e-mobility revolution.

With the objective to tackle climate change, diverse green policies, initiatives and markets have been developed. In this line, many societies of the Global North and companies support different policies and instruments to reduce carbon production, some of them with negative repercussions in the Global South (e.g. unsustainable exploitation of natural resources and human rights violations).

This module presents the case of the e-mobility, its benefits and externalities, and the Global North - Global South dynamic in global climate change policies. Analyzing this case, students will recognize the complexity of climate change initiatives, power relations between countries, and the multiple human rights at stake.

Readings

Stazzoni, R. (2018).

Flores, C. (2018)

WEEK 3

Class 3.1 Water: natural resource under pressure - Guest speaker.

Water is a limited natural resource fundamental for human life and biodiversity, but also for economic activities.

At present, less than 1% of the water in the world is fresh, drinkable and accessible, and more than 1 billion people live in water scarcity. In this context, due to population growth, increasing urbanization, industrialization and climate change, the pressure on this resource is increasing.

An expert from the civil society sector will develop the concepts of water stress and water scarcity, and explore the challenges of the current use of water scheme, and the interplay between industries, agriculture and daily human demand of this resource.

Readings Bakker, K. (2007).

Class 3.2 Land: a critical resource.





World population is expected to increase by 2 billion by 2050, reaching 10 billion people. This will generate greater pressure on the environment and a more sustainable management of natural resources will be needed.

In this scenario, land is a critical resource and its uses as forestry and agriculture account for 23% of human greenhouse gas emissions. At the same time, it provides biomass for renewable energy, absorbs carbon dioxide, and is a key factor to reach food security.

The module will address three central topics: sustainable and unsustainable land uses, land and climate change, food security and agriculture.

Readings

FAO. (2003). Giovannucci, D. (2012).

Media resource

Carbon Brief. (2019).

Class 3.3 Waste management - Visit to Buenos Aires City Recycling Center.

A growing population, unsustainable production and consumption patterns, and increasing urbanization, combine to cause waste management problems. In this context, resource recovery appears as an instrument to treat the disposals and transform them to then re-entry them into the productive process. Resource recovery helps reduce the amount of waste, the need of raw material for the production process, and produce energy.

By visiting the Buenos Aires City Recycling Center, students will understand the waste management problem and will observe the implementation of the recovery resource instrument, as well as identify its environmental, social and economic benefits.

Readings.

Sáez, A., Urdaneta G. & Joheni A. (2014) pp. 121-135.

Essay due.

Class 3.4 Renewable energies in the global energy system.





Currently, fossil fuels represent 80% of the global energy matrix. This energy source is responsible of the 2/3 parts of greenhouse gas emissions in the world. In this framework, renewable energies represent a cornerstone to make the global energy system sustainable. Renewable energy appears to be the one of the most efficient and effective solutions to environmental problems as carbon emissions.

The session will address the global energy matrix, the growing global energy demand, and the role of the renewable energies to move to a greener energy system.

Readings

Pasquevich, D. (2010).

Stuhldreher, A. (2012).

Media resource

Holzer, O. (2017).

WEEK 4

Class 4.1 Fossil fuels or renewable energies: Argentina study case.

Since 2010 Argentina has a negative energy balance with a level of consumption over its production capacity. To increase its energy production Argentina implemented -almost at the same time- two opposed energy policies: intensive exploitation of conventional and unconventional hydrocarbons in Vaca Muerta region; and the creation of renewable energies programs and the building of a renewable energies market.

The instructor will present the Argentine energy matrix, to then analyze and compare the fracking exploitation in the local south and the RenovAr program (national program of renewable energy). Students will be able to identify the characteristics of these two energy sources, and the challenges for the development of renewable energies. This study case will also provide a thorough understanding of the environmental, social and economic dynamic of the energy market.

Readings

Gutiérrez, F. (2018).

Constantini, P. y Di Paola, M. (2019).



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Class 4.2 Escazú Agreement: an environmental and social milestone.

In a context of economic, social and environmental difficulties, Latin American countries signed the first agreement in the world, for the protection of the environment and the environmental rights of those groups in a vulnerable situation. It incorporates guarantees for human rights defenders in environmental issues, and highlights the importance of public participation and access to justice of vulnerable groups.

Through the analysis of the Escazú agreement, this module addresses three social-environmental concerns in terms of human rights: 1) violence against human rights defenders in environmental issues; 2) access to justice; and 3) environmental safeguards for economic projects with high environmental and social impact.

Reading

Hernández Ordoñez, S. (2019).

Group research due.

Class 4.3 Concluding reflections.

Professor will do a debrief of the course and students will share their reflections and conclusions. Then, each student will do his/her final presentation.

Presentations due.





Course Materials

Readings

- Alberto, A. (2014) El Buen Vivir, más allá del desarrollo. In: Delgado Ramos, G. Buena vida, buen vivir: imaginarios alternativos para el bien común de la humanidad.
- Bakker, K. (2007) The "commons" versus the "commodity": Alter-globalization, antiprivatization and the human right to water in the global South. Antipode 39 (3): 430-455
- Constantini, P. y Di Paola, M. (2019) Programa RenovAr: ¿éxito o fracaso?. FARN.
- FAO. (2003) Agricultura mundial: hacia los años 2015/2030.
- Flores, C. (2018) El rol de las comunidades locales como actores centrales. In: Pulso Ambiental (10). August 2008. FARN.
- Giovannucci, D. (2012) Food and Agriculture: the future of sustainability. UNDESA.
- Gudynas, E. (2010) Desarrollo sostenible: una guía básica de conceptos y tendencias hacia otra economía. In: Otra economía. IV (6) 2010.
- Gudynas, E. (2004). Una mirada histórica al desarrollo sostenible. In: Gudynas, E. Ecología, Economía y Etica del Desarrollo Sostenible. Montevideo: Coscoroba.
- Gutiérrez, F. (2018) Soberanía energética, propuestas y debates desde el campo popular. Buenos Aires: Ediciones del Jinete Insomne.
- IPCC. (2018) Global warming of 1.5°C. Summary for Policymakers. Geneva: World Meteorological Organization.
- Pasquevich, D. (2010) La creciente demanda mundial de energía frente a los riesgos ambientales. AAPC.
- Sabsay, D. & Ryan, D. (2014). Introduction to the institutional aspects of argentine environmental law.
- Sáez, A., Urdaneta G. & Joheni A. (2014) Manejo de residuos sólidos en América Latina y el Caribe. In: Omnia, vol. 20 (3) 2014: 121-135. Maracaibo.
- Stazzoni, R. (2018) Autos eléctricos: placer, eficiencia, ambiente, salud y economía. In: Pulso Ambiental (10). August 2008. FARN.
- Stuhldreher, A. (2012) Energías Renovables en el MERCOSUR ¿Un aporte al crecimiento sustentable?. FLACSO. Buenos Aires
- UNEP. (2007) Guide for Negotiators of Multilateral Environmental Agreements.





Media Resources

- BBC. (2019) Qué es el cambio climático: 10 términos fundamentales para entender el fenómeno. May 2, 2019. Retrieved from https://www.bbc.com/mundo/noticias-48134021
- Carbon Brief. (2019) In-depth Q&A: The IPCC's special report on climate change and land. Retrieved from https://www.carbonbrief.org/in-depth-qa-the-ipccs-special-report-on-climate-change-and-land
- El Cronista. (2018) Como hacer de la economía circular un buen negocio. October 18, 2018. Retrieved from https://www.cronista.com/responsabilidad/Como-hacerde-la-economia-circular-un-buen-negocio-20181018-0003.html
- Hernández Ordoñez, S. (2019) El Acuerdo de Escazú. Foreign Affairs Latinoamérica. Retrieved from: https://www.dipublico.org/111461/el-acuerdo-de-escazu/
- Holzer, O. (2017) Resumen del World Energy Outlook 2017. Economía de la energía. November 21, 2017. Retrieved from http://www.economiadelaenergia.com.ar/resumen-del-world-energy-outlook-2017/

Lecturer's Bio

Leandro Gomez has a Masters Degree in Public Administration and a degree in Political Science, from the University of Buenos Aires. He is a member of the Environmental Policy Area of the Environment and Natural Resources Foundation (FARN), where he is doing research on lithium mining in Argentina. He has been an external advisor of the Facultad de Ciencias Económivas (Economics Faculty) of the Universidad de Buenos Aires (University of Buenos Aires), and an international resident of the Charles Kettering Foundation, United States.

