

#### ENVI303/SUM

#### ENVIRONMENTAL AND POLITICAL CHALLENGES FOR A SUSTAINABLE FUTURE

Programs offering course	Summer 2020
Language of instruction	English
U.S. Semester Credits	3
Contact Hours	45
Term	Summer 2020
Course meeting times	TBD
Course meeting place	FLACSO Argentina
Professor	Leandro Hernán Gomez
Contact Information	adelastudyabroad@flacso.org.ar
Office address	Tucumán 1966 CABA
Office hours	TBD

# **Course Description**

This course seeks to provide students with a thorough understanding of the main global environmental challenges and concerns, their repercussions at a global and local level, and contemporary challenges to reach a sustainable future. The course is organized around the following interconnected axes: the interplay between human beings and the environment, the political arena, contemporary environmental concerns and challenges, and energy sources and their importance to reach a sustainable development. Students are expected to acquire critical thinking on environmental issues at present and on the challenges for the future basing on environmental, political and business theoretical approaches as well on the study and analysis of Latin American cases.

# **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.



- Analyze central environmental concerns faced today (such as climate change and water scarcity), 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

### **Course Structure**

# **Online learning dynamic**

The course has an interdisciplinary perspective. It comprises scholarship from political, environmental and business sciences. It will be taught using online presentations, readings, guest speakers and forums. The course is divided in four modules, each module includes an online presentation by the instructor (video), mandatory readings, co-curricular activities (films, videos and interviews), and forum debates. At the end of each module students will have an assessment. This dynamic method will enable students to understand the theoretical concepts and implement the acquired knowledge on the forum exercises and required assessments.

#### **Assessment and Final Grade**

Quiz I	20%
Quiz II	20%
Essay	35%
Participation	25%
TOTAL	100%

# **Course Requirements**

# Quiz I

At the end of the first module, students will take a quiz that assesses the understanding of environmental theoretical concepts and political dynamics.

The quiz will contain questions and a reflexive task. Their answers should be based on the materials discussed on the first module.





#### Quiz II

Students will take a quiz that assesses the understanding of the climatic crisis addressed in the second module.

The quiz will contain questions and a reflexive task. Their answers should be based on the materials discussed on the first module.

#### **Essay**

Each student will have to select one of the topics presented during the last two modules of the course and elaborate an essay. The student is expected to 1) analyze the topic; 2) identify stakeholders; and 3) include recommendations to tackle the central concerns of the topic selected.

This assignment should be between 1500 and 2500 words.

It will enable students to implement the concepts assessed in the module and critically think the topic of their preference.

### **Weekly Schedule**

# WEEK 1 MODULE 1: ENVIRONMENTAL CRISIS AND SUSTAINABILITY

Presentation of the professor. Overview of the syllabus, methods of instruction and assessments.

Then, the instructor will introduce 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 adaptation capability, globalization and sustainable development will be discussed.

Mandatory readings: Gudynas, E. (2019). Hopwood, Mellor & O'Brien. (2005)

Online resources: United Nations. (2015).

Optional readings: Gudynas, E. (2011).

Due: Quiz I

# WEEK 2 MODULE 2: 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 to all societies.

This session discusses the causes and effects of climate change with a focus on the Latin America region. Concepts as fair transition and e-mobility, and Global North-Global South relation will be addressed.

Mandatory readings: ECLAC. (2015). Pp 13-23. Frankel. (2016).

Optional readings: Mata and Campos. (2018).

Media resources: LatAm Investor. (2019).

Due: Quiz II.

# WEEK 3 MODULE 3: WATER, CRITICAL RESOURCE

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.

The concepts of water stress and water scarcity will be presented, and the interplay between this critical resource and economic activities will be explored.

Mandatory readings UN. (2019). Pp. 7-27

Optional readings: Cook and Bakker. (2012). Dehghan, S. (2020).

Media resource: Uchoa. P. (2019).

### WEEK 4 ENERGY: FOSSIL FUELS VS RENEWABLE ENERGIES.

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 one of the most efficient and effective solutions to environmental problems as carbon emissions.

The instructor will present the Argentine energy matrix, to then analyze the local debate between the fracking exploitation and the renewable energy development.





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

In addition, the professor will do a debrief of the course.

Readings:

Zanotti, G. at al. (2017). Guzowski and Recalde. (2008).

Optative reading:

Zabaloy and Guzowsky. (2018).

Media resource Al Jazeera. (2019). Marcacci, S. (2019).

Due: Essay

#### **Course Materials**

#### Readings

- Cook, C.; Bakker, K. (2012). Water security: Debating an emerging paradigm. In Global Environmental Change, 22, p. 94-102.
- ECLAC. (2015). The economics of climate change in Latin America and the Caribbean.
- Frankel, T. and Whoriskey, P. (2016). Tossed aside in the white rush. The Washington Post.

  Retrieved from https://www.washingtonpost.com/graphics/business/batteries/tossed-aside-in-the-lithium-rush/
- Gudynas, E. (2011). Today's Tomorrow. In Development. 54 (4), pp. 441-447.
- Gudynas. E. (2019). "Revolution". In: Kothari, A. et al. Pluriverse. A Post-Development Dictionary. Tulika & Authors Upfront, New Delhi.
- Guzowski, C. and Recalde, M. (2008). Renewable energy in Argentina: Energy policy analysis and perspectives. International Journal of Hydrogen Energy. (2008). 33. Pp 3592-3595.
- Hopwood, B., Mellor, M., O'Brien, G. (2005), "Sustainable Development. Mapping different approaches", Sustainable Development, 13, pp. 38–52
- Inostroza, L. (2016). Climate change adaptation responses in Latin American urban areas. Challenges for Santiago de Chile and Lima. En Nail, S. (Ed.) Cambio climatico. Lecciones de y para ciudades de America Latina. pp 391-417.
- Mata, L. and Campos, M. (2018). Latin America. IPCC.
- REN 21. (2019). Renewables 2019. Global status report.
- UN. (2019). Climate change and water. Water policy brief.
- Zabaloy, M. and Guzowsky, C. (2018). Energy transition policy from fossil fuels to renewable energy: the case of Argentina, Brasil and Uruguay in 1970-2016 period.





Zanotti, G. at al. (2017). Winners and losers in Argentina in the age of unconventional hydrocarbons. EJES.

#### Media sources:

- Al Jazeera. (2019). Petróleo argentino: explorando el fracking en Vaca Muerta. Retrieved from https://www.youtube.com/watch?v=Mo-bdN3jemo&vl=es
- Dehghan, S. (2020). Water wars: early warning tool uses climate data to predict conflict hotspots. January 8, 2020. Retrieved from https://www.theguardian.com/global-development/2020/jan/08/water-wars-early-warning-tool-uses-climate-data-to-predict-conflict-hotspots
- LatAm Investor. (2019). How will Climate Change Impact Latin America?. May 28, 2019. Retrieved from https://latam-investor.com/2019/05/will-climate-change-impact-latin-america/
- Marcacci, S. (2019). 2019). Argentina May Be the Hottest Renewable Energy Market You Haven't Heard Of. Can It Spur a Global Boom? Forbes. October 15, 2019. Retrieved from https://www.forbes.com/sites/energyinnovation/2019/10/15/argentina-may-be-the-hottest-renewable-energy-market-you-havent-heard-of-can-it-spur-a-global-boom/#11a69f4eeeb2
- Uchoa. P. (2019). ¿Cuán probable es que tu país sufra escasez de agua? BBC. 6 de agosto de 2019. Retrieved from https://www.bbc.com/mundo/noticias-49251961
- United Nations. What is Sustainable Development. https://www.un.org/sustainabledevelopment/blog/2015/09/what-is-sustainabledevelopment/

### 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 a research on lithium mining in Argentina. He has been an external advisor of the Facultad de Ciencias Económicas (Economics Faculty) of the Universidad de Buenos Aires (University of Buenos Aires), and an international resident of the Charles Kettering Foundation, United States.