

# UNIVERSIDAD SAN FRANCISCO DE QUITO SCHOOL: CIENCIAS E INGENIERÍAS COURSE: INA 5003E - Climate Change and Society

COURSE DETAILS:

Credits: 3 Prerequisites: Verify prerrequisites in Banner academic system. Co requirements: The course does not have Co requirements

#### **COURSE DESCRIPTION:**

This class introduces scientific, economic, ecological and social issues underlying the threat of global climate change and explores the factors that influence it. The course examines (1) natural and human causes of past and recent changes in temperatures and other climatic variables; (2) possible impacts of ongoing and expected future human emissions of greenhouse gasses on ecosystems and society; (3) and possibilities to avert dangerous climate changes.

#### COURSE LEARNING OUTCOMES:

#	Learning Outcomes	Level	
1	Demonstrate knowledge concerning the major factors that affect Earth?s climate, the impacts of technological advances on the composition of the atmosphere, how that causes global climate change, and how the science of climate change influences society today.		
2	Analyze basic climate information data, to assess potential impacts of climate change, the types of changes in human behavior that will be required to address the problem, predicted costs of climate change as well as proposals for mitigation.		
3	Evaluate ongoing and predicted future climate change in historic context by comparing it to past changes.		
4	Articulate, in writing, a critical perspective on climate change involving science, technology, and society using evidence as support with an emphasis on critical thinking.		
5	Analyze the role of science and technology in shaping those fields of study over time.		

# **COURSE CONTENTS:**

- Science of climate change
- Impacts of climate change
- Economics and Politics of climate change
- Adaptation and mitigation



# METHODOLOGY FOR THE INTEGRATION OF THEORETICAL AND PRACTICAL CONTENTS:

The teaching methodology used to teach all the course at USFQ follow the liberal arts philosophy: encourage dialogue and enable the learning construction through providing opportunities for ideas exchange among teachers and students. It is expected that all the theoretical content courses explore potential applications to the professional practice and work context where students are anticipated to perform through the integration of diverse activities and simulations that foster the contextualized understanding of concepts using reality and professional practice as frames of reference.

## HOURS DESCRIPTION OF APPLIED PRACTICE

If this course has declared applied practice hours (laboratories, exercises, field trips, practicums, etc.); the instructor for the theoretical element is responsible for describing how the applied practices hours will be fulfilled and assessed during the semester.

Students must pass or fail both the theoretical and application practice components simultaneously.

All courses with declared applied practice hours must provide students with a written guide detailing the requirements for fulfilling the application practice component.

#### COURSE ASSESSMENT:

Each instructor is responsible for creating an evaluation scheme that corresponds to the learning outcomes declared for each course. The assessment scheme should be presented in a clear and direct manner, such as a chart that indicates the assessment categories and the elements included in each category; it must indicate the total weight that each category will have on the final grade. Category weights may vary, but under no circumstance can an individual element weigh more than 25% of the final grade. For example, it is acceptable for a "Homework" category to weigh 30% if it includes three tasks that weight 10% each. However, a "Final Exam" category that weighs 30% and only includes on element would be unacceptable.

Some academic areas or specific courses have pre-established assessment parameters. In these cases, all instructors assigned to these courses must follow the pre-determined scheme.

If this course has declared applied practice hours (laboratories, exercises, field trips, practicums, etc.) the assessment of these hours must be incorporated within the course's general assessment scheme.

#	Category	Description	Percentage of final grade



# MAIN BIBLIOGRAPHY:

[The main bibliography must be in library in physical or digital format]

•, Climate change 2014 :, Geneva 2 : Intergovernmental Panel on Climate Change, 2015.

## **COMPLEMENTARY BIBLIOGRAPHY:**

[The complementary bibliography can be digital format]

#### POLICIES:

All students taking courses at USFQ must follow the ethics of learning, ethics of research and ethics of behavior rules detailed in the <u>USFQ's Code of Honor and Coexistence</u>. All the general policies for the courses offered at USFQ are detailed in the Student's Manual, it can be downloaded in <u>Manual del Estudiante</u>.

This syllabus (Syllabus) was reviewed and approved by the coordination of the academic area or department responsible, so all the parallels that are dictated must be governed by this program. If changes / adjustments to the study program are necessary, you should To the coordination of the academic area or department responsible so that the approved changes / adjustments are reflected in the system of Curricular design.'