Climate Change

ENVST-UA 9226/ ANTH-UA 9061 L01

NYU London: Fall 2021

Instruction Mode: Blended

If you are enrolled in this course 100% remotely and are not a Study Away student at NYU London, please make sure that you've completed the online academic orientation via Brightspace so you are aware of site specific support structure, policies and procedures. Please contact nyul.academics@nyu.edu if you have trouble accessing the Brightspace site.

Instructor Information

- Dr. Lisa Weber
- Lisa.Weber@nyu.edu
- Zoom, appointment only

Course Details

- Thursdays 2.30-5.15pm BST (from November 1st: GMT)
- All times are BST/GMT (Daylight Saving Time ends 31 October).
- Location: NYU London, 6 Bedford Sq., Room: G07
- Remote Participants: Zoom links are provided in Brightspace.
- Seat Assignments: If you are attending in person, you will be assigned a seat on the first day and are expected to use that seat for the entire semester due to NYU COVID-19 safety protocol.

Course Description

Climate change is among the most complex and challenging problems that we have confronted as a civilization, but the responses and impacts will vary largely across space and the global population. This course is designed to give you an overview of the scientific basis of climatic change, and will expose you to multiple facets of a very interdisciplinary and encompassing field. You will be introduced to the physical science of our climate system, the contributing system components, and the basic mechanisms that govern how the climate system responds to drivers of change. We'll then explore climate change from multiple perspectives: paleo climatic change, recent historical variability and change (e.g. due to

COVID19), future climate projections as well as social and economic issues. A typical session will start with an hour long lecture followed by more practical group work for consolidate learning.

Course Objectives

- Explain how the climate system works.
- Understand the physical basis of climate change.
- Describe how human activities are influencing greenhouse gas emissions.
- Investigate projections about past and possible future climate change on Earth.

Assessment Components

If you are an NYU London study-away student, you are expected to attend in person. If you are accessing the class remotely, you must attend synchronously.

Assignments / Activities	Description of Assignment	% of Final Grade	Due
Weekly Homework Assignments	Weekly lab & reading assignments	25%	TBA every week
Video Presentation	Presentation of peer-reviewed articles	15%	Oct. 27th
Essay	Research paper (content TBA)	20%	Dec. 2nd
Revision Test 1	Midterm exam: Assessment of the student's understanding of the Climate System.	15%	Oct. 10th
Revision Test 2	Final Exam: Assessment of the student's understanding of the Climate System.	25%	Dec. 16th TBC

Assessment Expectations

Letter Grade	Grade Percentage	Description
A-range	A = 93-100% A- = 90-92%	Excellent understanding of the course content, applying theoretical and conceptual issues.
B-range	B+ = 87-89% B = 84-86% B- = 80-83%	Good understanding of the course content, reasonable application of theoretical and conceptual issues.
C-range	C+ = 77-79% C = 74-76% C- = 70-73%	Some general understanding. Nevertheless mostly superficial understanding which misses some essential elements.
D-range	D+ = 67-69% D = 65-66%	Lacking in understanding of the course content. Poor attention to essential details. Nevertheless a vague and general idea of the basic concepts.
F	F = below 65%	Lacking in understanding and misunderstanding of the course content. Lack of attention to essential details.

Course Materials

Required Text(s) & Materials

- N/A. Required readings will be made available during the semester on the course Brigthspace page.

Optional Text(s) & Materials

- Further readings will be made available during the semester on the course Brigthspace page.

Resources

- **Access your course materials**: Brightspace
- **NYU London and Living in London Info:** LDN
- **Databases, journal articles, and more**: Bobst Library
- **Assistance with strengthening your writing**: NYU Writing Center (nyu.mywconline.com)

- **Obtain 24/7 technology assistance:** IT Help Desk

Course Schedule

Reminder: Links to join class Zoom meetings will all be available in Brightspace.

Topics & Assignments

Week/Date	Topic	Reading	Assignment Due
Session 1 Sep. 2nd	Introduction	Required readings will be made available during the semester in Brightspace.	Due dates for weekly homework assignments will be announced in class and in Brightspace.
Session 2 Sep. 9th	Atmosphere I: Earth Energy Budget		
Session 3 Sep. 16th	Atmosphere II: Atmospheric Dynamics		
Session 4 Sep. 23rd	Ocean I: Physical Processes		
Session 5 Sep. 30th	Ocean II: Biogeochemical Processes		
Session 6 Oct. 7th	Extreme Weather		
Session 7 Oct. 14th	Revision Test 1 (Midterm Exam)		
Session 8 Oct 21st	Terrestrial Carbon Cycle I: Soils		
Session 9 Oct. 28th	Terrestrial Carbon Cycle II: Plants		Video deadline (Oct. 27th!)
Session 10 Nov. 4th	Polar Regions and Sea Level Rise		

Session 11 Nov. 11th	Paleoclimate		
Session 12 Noc. 18th	Climate Models and Predictions		
Session 13 Dec. 2nd	Negotiation of a Global Climate Agreement		Essay deadline
Session 14 Dec. 9th	The Climate Emergency		
Final Assessment Dec.16th (tbc)	Finals Week: Revision Test 2		

Course Policies

Classroom Etiquette

To optimize the experience in a blended learning environment, please consider the following:

- Please be mindful of your microphone and video display during synchronous class meetings. Ambient noise and some visual images may disrupt class time for you and your peers.
- Please do not eat during class and minimize any other distracting noises (e.g. rustling of papers and leaving the classroom before the break, unless absolutely necessary).
- If you are not using your cell phone to follow the lesson, cell phones should be turned off or in silent mode during class time.
- Make sure to let your classmates finish speaking before you do.
- If deemed necessary by the study away site (ie COVID related need), synchronous class sessions may be recorded and archived for other students to view. This will be announced at the beginning of class time. However, NYU London's policy is to ensure classes are synchronous and therefore classes are usually not recorded.
- Students should be respectful and courteous at all times to all participants in class.

Final exams

Final exams must be taken at their designated times. Should there be a conflict between your final exams, please bring this to the attention of the London Academics team (nyul.academics@nyu.edu). Final exams may not be taken early, and students should not plan to leave the site before the end of the finals period.

Academic Honesty, Plagiarism and Late Work

Students at Global Academic Centers must follow the University and school policies. You can find details on these topics and more on this section of our NYUL website (https://www.nyu.edu/london/academics/academic-policies.html) and on the Policies and Procedures section of the NYU website for students studying away at global sites (https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html).

Attendance

Key information on NYU London's absence policy, how to report absences, and what kinds of absences can be excused can be found on our website (http://www.nyu.edu/london/academics/attendance-policy.html)

To ensure the integrity of the academic experience, class attendance is required and expected promptly when class begins. These rules apply to class excursions and activities as well.

Members of any religious group may, without penalty, excuse themselves from classes when required in compliance with their religious obligations, but must follow NYU London's absence reporting procedure. Please note that an absence is only excused for the holiday but not for any days of travel that may come before and/or after the holiday. See also University Calendar Policy on Religious Holidays

Moses Accommodations Statement

Academic accommodations are available for students with documented and registered disabilities. Please contact the Moses Center for Student Accessibility (+1 212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

Inclusivity Policies and Priorities

NYU's Office of Global Programs and NYU's global sites are committed to equity, diversity, and inclusion. In order to nurture a more inclusive global university, NYU affirms the value of sharing differing perspectives and encourages open dialogue through a variety of pedagogical approaches. Our goal is to make all students feel included and welcome in all aspects of academic life, including our syllabi, classrooms, and educational activities/spaces.

Pronouns and Name Pronunciation (Albert and Zoom)

You can edit your pronoun and name pronunciation information on your Albert account, making it visible for faculty and staff. Information on how to do this can be found on the Pronouns and Name Pronunciation web page, and for more information on how to make these changes in Zoom, please see the Personalizing Zoom Display Names website.

Bias Response

The New York University Bias Response Line provides a mechanism through which members of our community can share or report experiences and concerns of bias, discrimination, or harassing behavior that may occur within our community. For more information, including how to report an incident, visit the Bias Response Line website.

Your Lecturer

Dr Lisa Weber has a PhD in Marine Sciences, in addition to a first class degree and an MSc equivalent in Physical Geography. Her most recent jobs were Visiting Lecturer for Climate Change Science at the University of Southampton and Associate Lecture for Oceanography at the Open University. Prior to that she worked as postdoctoral researcher at the National Oceanography Centre in Southampton for almost 10 years. Her entire education at University and subsequent jobs have revolved around environmental and marine issues related to climate change. Her previous main research was focused on the biogeochemical cycles of nutrients in marine ecosystem models, which is an important aspect of the global carbon cycle and climate change research. Currently she is investigating the truly interdisciplinary nature of climate change and the need to change our norms and the way we think in order to overcome climate change.