

ENV 199, Glaciers no more? Climate Change and the Alps Department of Environmental Sciences, Fall 2018



COURSE INFORMATION

Instructor: Professor Brack W. Hale bhale@fus.edu Office hours: Monday/Thursday 2:30 p.m.-4:30 p.m. or by appointment Classroom meeting location: LAC Clasroom 5 Classroom meeting times: Monday/Thursday 10 a.m.-11:15 a.m.

COURSE DESCRIPTION AND GOALS

Climate change has been named one of the most important issues facing our society and globe today. At particular risk are regions at high latitudes and altitudes, including the Alps. This course examines the complex issue of climate change, considering the scientific background of climate and how it changes, the impact of those changes on ecological and human systems, and possibilities for mitigating these impacts. The course focuses on the situation in the Alps, but also examines climate change in a global context. An integral and required part of the course will be a weekend field trip to the Alps. Like all First Year Seminars, this course will cultivate the fundamental critical and academic skills necessary for succeeding at the university level.

FYS PROGRAM

The First Year Seminar is part of the First Year Experience that connects academic work with other aspects of Franklin such as orientation, advising, academic support, residential life, and co-curricular activities. A foundational piece in the university core, it is required for all incoming students, incoming study abroad students, transfer students with fewer than 30 credits and advanced bridge program students.

The broad goal of this course is to help students adapt to university-level academics. It prepares students for a successful incoming year by introducing them to academic resources available on and emphasizes the development of critical thinking and analytical skills. It also provides opportunities to attain general study and research skills that transfer to other classes both across and up the curriculum.

STUDENT LEARNING OBJECTIVES

At the end of this course, students should be able to:

- explain how the climate functions;
- describe how glaciers form;
- discuss several ways climate can change, both naturally and through human influence;
- analyze research and writings on climate change critically and scientifically;
- explain how climate change has impacted Switzerland and the Alps both ecologically and socioeconomically;
- assess logically approaches to dealing with current and future climate change;
- perform basic data analyses and create graphs in Excel;
- accomplish the above objectives in both written and oral formats at a level appropriate for college students; and
- use campus resources to facilitate successful completion of course assignments.



REQUIRED TEXTS AND MATERIALS

- Romm, J. 2018. *Climate change: what everyone needs to know.* Oxford University Press: New York. *See Moodle for instructions on purchasing ebook*.
- Other readings on Moodle as posted.

COURSE EXPECTATIONS AND STRATEGIES FOR SUCCESS

- Participation expectations are summarized in Table 1. Students should be in class on time, every day. If you are late without good reason, it counts as an absence.
- Students must come to class well prepared and actively participate. Students should expect readings and (generally) short assignments for every class period.
- Student behavior reflects professional behavior expected in most job settings.
- Students may not use laptops, cell phones, tablets, or other electronic devices during in class activity, in the classroom; phones must be turned on vibrate or off during class.
- Students inform professor immediately of any circumstances that may affect their attendance or performance in class. Students seek out materials from any missed classes on their own. I do not hand out lecture notes or slides.
- Unless otherwise stated, you will turn in all assignments on Moodle. Assignments submitted in other formats will not be considered. Assignments turned in late drop 10% of the grade per day.
- Students should check their student.fus.edu account and Moodle page DAILY.

Grade	Attendance	General classroom behavior	Discussion behavior	
Excellent	No absences	Acts professionally at all times; constructively interacts with others. Respects electronic device policy.	Readily engages in discussion, asks relevant questions, employs concrete examples, integrates previous material, and provides thoughtful insights. Does not dominate discussions.	
Good	Maximum 2 absences	Often acts professionally, generally interacts with professor and classmates constructively.	Often engages in discussion, alludes to readings to support comments. Comments are less thoughtful and more spontaneous.	
Satisfactory	Maximum 3 absences	Needs to be occasionally reminded to behave appropriately.	Only engages when called upon, does not connect comments to readings, but provides appropriate insights.	
Poor	3+ absences*	Student's behavior often disrupts/disrespects group. Ignores class policies.	Student silent, makes irrelevant comments, or is unable to engage in conversation about class topics OR attempts to dominate.	

Table 1: Participation rubric

*After five absences, the student fails the course. Exceptions made for documented extraordinary situations.

MAJOR ASSIGNMENTS AND GRADING

- Final grades are calculated using rubric in Table 2.
- Regular homework engages students with readings and class activities. Students should maintain a handwritten notebook for reading notes and homework that they will hand in on request. Homework is generally graded based on effort, unless otherwise stated.
- Students will present a relevant news story related to climate change and lead a brief discussion. See prompt on Moodle.
- You are required to attend four *Tutte le Strade* (TLS) events: three are pre-chosen (see calendar).
- Students will write several short reports with presentations that are based on case studies or simulations.



- The class will develop and present a student climate action guide for the FYS Showcase at the end of the semester.
- I grade all course activities on a letter scale (A F). I use intermediate grades (e.g. AB, BC) rather than +/- for all coursework.

Grade level	Classroom	Homework completed	Graded activities*
А	Excellent	90+ %	A-average
В	Good	80+ %	B-average
С	Satisfactory	70+ %	C-average
D	Satisfactory	60+ %	D-average
F	Poor	< 60 %	F-average

Table 2: Final grade rubric (+/- given for intermediate situations)

* showcase project 10%; tests 40%; papers 40%; presentations 10%

CAMPUS RESOURCES AVAILABLE

- Writing and Learning Center (WLC): The center and its staff strive to help you develop strong writing and study habits. Located on the second floor of LAC. <u>Make an appointment at</u>: <u>https://wlc.setmore.com</u>
- Learning Services: If you have a documented learning disability, or think that you may need additional learning services, please see me and the WLC.
- Libraries: Franklin has two libraries, Grace (Kaletsch campus) and Fowler (North Campus). The librarians are excellent people to help you find resources. Students may also use the USI library downtown.
- Information Technology (IT): Franklin's IT staff is located on the first floor of the LAC

ACADEMIC INTEGRITY

Please refer to Franklin's *Statement on Cheating and Plagiarism* in the *Academic Catalog* for the full version, but to summarize here: **you are to do your own work**. Behaviors such as copying the work of others, using third-party services, or any other circumvention of doing your own work are dishonest and not acceptable in this class or at this institution. For testing situations, this includes the use of unpermitted materials or copying off a classmate; for papers and presentations, this includes improper use of references and citations. Copying text without the use of quotations or paraphrasing the ideas of others without proper citations are both examples of plagiarism and thus unacceptable.

The first case of academic dishonesty will result in an automatic grade of a zero on the assignment and a report to the Academic Dean. The second case will result in immediate failure of the course and recommendation to the Academic Dean for expulsion from the university. See the Academic Catalog for full statement (page 199):

https://www.fus.edu/images/pdf/FUS_ACADEMIC_CATALOG_2018_2020_web.pdf



Tentative Schedule (changes posted to Moodle)

Monday		Thursday		Other Dates
	Chapter readings refer to textbook; other readings are posted on Moodle.	23-Aug	FYS overview	
27-Aug	Global Climate Change—an overview Chapter 1	30-Aug	<i>TLS: Alcohol awareness meeting</i> (meet at auditorium)	28 Aug: TLS Convocation
3-Sep	Climate change basics	6-Sep	Extreme events and climate Chapter 2	
10-Sep	Extreme events TLS: Sustainability on Campus	13-Sep	Quiz Analyzing climate data	
17-Sep	Reading scientific literature Using Franklin's library Data presentations	20-Sep	Climate change in the mountains See readings on Moodle	22 Sept: Field trip
24-Sep	Field trip discussion/Impacts of climate change Chapter 3	27-Sep	No class	
1-Oct	Case study introduction and library workshop	4-Oct	Test	
8-Oct	Scientific writing and giving presentations	13-Oct	Group project work time	
15-Oct	Peer review session	20-Oct	Project presentations and papers due	
	Academic Travel		Academic Travel	
5-Nov	Registration for Spring Chapter 4	8-Nov	IPCC, Paris, and adaptation	
12-Nov	Climate mitigation approaches Chap. 5	15-Nov	Policy simulation	
19-Nov	Energy solutions- Chapter 6	22-Nov	Group research day	
26-Nov	Personal approaches Chap. 7	29-Nov	Preparation for FYS showcase <i>Simulation report due</i>	
3-Dec	The new CH2018 Swiss climate models Wrap-up	6-Dec	Showcase prep	7 Dec: FYS Showcase
	Final exam: 13 December 08:30 – 10:30			