University at Buffalo
The State University of New York

GLY 198-UB Seminar: Global Warming

1 credits

COURSE INFORMATION

Date(s)/Time(s): TBA
Location: TBA
Instructor: TBA (Jason Briner/Elizabeth Thomas/Bea Csatho)
Contact Information: TBA

COURSE DESCRIPTION

Global warming is the largest environmental issue global society has ever faced. Global warming affects sea level rise, storm frequency, droughts and potentially even wild winter weather experienced in Buffalo. Despite climate change costing global economies trillions of dollars, there is reluctance to alter ways of life, and even plain denial that climate change relates to human activities. This 1-credit UB Seminar focuses on the big and often controversial topic of global warming. Students will explore the science, impacts and mitigation of both global and local climate change through lectures, exercises, in-class activities, discussion and debate.

COURSE REQUIREMENTS

1. ATTENDANCE/PARTICIPATION. Participation and contributing to in-class discussions and informal activities will constitute 8% of your final grade.

2. HOMEWORK. There will be 6 homework assignments. Each will count for 7%, for a total of 42% of your final grade. All homeworks will utilize the e-portfolio.

Homework 1 – *Part A. Getting to know the IPCC report. Part B. Calendar check.*
Homework 2 – *The context for climate change: forcing mechanisms of climate change and Paleoclimate.*
Homework 3 – *Example of climate change unknown: Arctic warming and cold Buffalo winters. Calendar Check.*
Homework 4 – *Academic integrity: Explore the role of funding sources for climate change research – and the strings attached.*
Homework 5 – *Student choice topic, scientific literature annotated bibliography. Research skills, UB library and Zotero.*
Homework 6 – *Making a power point presentation of your research topic.*

3. IN CLASS CASE STUDIES. There will be 4 case studies with student-led discussion throughout the semester (see schedule below). Each will count for 5%, for a total of 30% of your final grade.

Activity 1 – *IPCC working groups. In this exercise, students will be divided into three working groups, following the structure of the IPCC report, and give class presentations on the latest findings from the IPCC.*
Activity 2 – *Sea Level Rise and New York City, how Sandy changed New York and New Yorkers*
Activity 3 – *Analyzing climate data, addressing what is robust vs. what is uncertain about global warming*
Activity 4 – *Debate: What to do about climate change?*

4. SHORT PAPER. There will 1 short paper for 20% of your final grade. The paper of scientific writing, with bibliographies and proper citing, will focus on a topic of the student's choice. The paper will require navigation through UB's library resources and research strategies using literature and journal articles.

STUDENT LEARNING OUTCOMES: Having completed this UB Seminar, students will be able to:

Course Learning Outcome	Delivered through the Following Instructional Method(s):	Student Achievement Assessed with the Following Method(s)/Assignments:
Articulate the components of the UB Curriculum program and the integration of multiple disciplines.	Lectures	Degree program assignment, attendance at appropriate programs
Understand their chosen major or other fields of study and the key concepts that will be explored in those disciplines.	Lectures, Homework and Case Studies	Journal or paper, discussion and academic plan, attendance at appropriate programs if offered.
Describe the unique character of higher learning in a university, such as deep domain knowledge, the role of research, and the value of experiential learning.	Assigned readings related to 4 case studies	Journal, paper, readings, and discussion; attendance at appropriate programs if offered.
Understand the necessity for writing/communication in university and professional settings.	Short paper, Case Study presentations, Homework 6	Written and oral assignments to reflect learning outcomes.
Initiate use of the eportfolio and select a thematic framework for the UB Curriculum program using articulated transfer and UB coursework.	Lecture and homework assignments	Assess the eportfolio written material and other presentations of outcomes; develop integrative material.

Note: *This course meets or contributes to meeting the SUNY General Education Requirements (GER) for Critical Thinking, Information Literacy, and Basic Communication: (SUNY website), as well as areas of general education required by the Middle States Commission on Higher Education.

GRADING POLICY

Learning assessments will be graded based on rubric criteria and weighted according to the following break-down.

Weighting	Assessment / Assignment
8%	Class participation
42%	Homework
30%	Activities
20%	Short paper
100%	

Final Grades:

Grade	Quality Points	Percentage (EXAMPLE)
A	4.0	93.0% -100.00%
A-	3.67	90.0% - 92.9%
B+	3.33	87.0% - 89.9%
B	3.00	83.0% - 86.9%
B-	2.67	80.0% - 82.9%
C+	2.33	77.0% - 79.9%
C	2.00	73.0% - 76.9%
C-	1.67	70.0% - 72.9%
D+	1.33	67.0% - 69.9%
D	1.00	60.0% - 66.9%
F	0	59.9 or below

Incompletes (I/IU): A grade of incomplete ("I") indicates that additional course work is required to fulfill the requirements of a given course. Students may only be given an "I" grade if they have a passing average in coursework that has been completed and have well-defined parameters to complete the course requirements that could result in a grade better than the default grade. An "I" grade may not be assigned to a student who did not attend the course.

Prior to the end of the semester, students must initiate the request for an "I" grade and receive the instructor's approval. Assignment of an "I" grade is at the discretion of the instructor.

The instructor must specify a default letter grade at the time the "I" grade is submitted. A default grade is the letter grade the student will receive if no additional coursework is completed and/or a grade change form is not filed by the instructor. "I" grades must be completed within 12 months – see the Incomplete Grade Policy for the schedule. Individual instructors may set shorter time limits for removing an incomplete than the 12-month time limit. Upon assigning an "I" grade, the instructor shall provide the student specification, in writing or by electronic mail, of the requirements to be fulfilled, and shall file a copy with the appropriate departmental office.

Students must not re-register for courses for which they have received an "I" grade

ACADEMIC INTEGRITY

Academic integrity is a fundamental university value. Through the honest completion of academic work, students sustain the integrity of the university while facilitating the university's imperative for the transmission of knowledge and culture based upon the generation of new and innovative ideas.

- Reference to the university Undergraduate Academic Integrity Policy and any additional instructor requirements and comments regarding academic dishonesty.

ACCESSIBILITY RESOURCES

If you have any disability which requires reasonable accommodations to enable you to participate in this course, please contact the Office of Accessibility Resources, 25 Capen Hall, 645-2608, and also the instructor of this course. The Office of Accessibility Resources will provide you with information and review appropriate arrangements for reasonable accommodations.

STUDENT WELLNESS

If you are struggling with student responsibilities for whatever reason this semester please don't hesitate to contact me so I can do my best to help you achieve. UB has a variety of support services for you. For more information, see here: http://couseling.buffalo.edu and here: http://www.student-health.buffalo.edu.

Classroom Policies:

Be Present. You must attend all class sessions for course mastery. An unexcused absence will result in the loss of participation points and will impact your final grade. Excessive absences could result in your failure of the course. If you have a University-sanctioned reason for being absent, please contact me *before* the scheduled class meeting time and I will do my best to accommodate you.

Be Prompt. Important information is most commonly delivered at the very beginning of class, students who arrive late to class are responsible for any information that is missed. Arriving late can affect your grade. Without prior arrangement, arriving late during an exam incurs a 1-point per minute penalty (e.g., if you are five minutes late, 5 points are deducted from your exam grade).

Be Prepared. You are expected to bring yourself, writing utensil and notepaper to class each session. Take-home assignments are designed to reinforce acquired concepts or skills learned in class, or are designed to inform you of a base level of understanding that can be built upon in the classroom. Your involvement, as well as your performance, in classroom activities will be evaluated.

Be Polite. Cell phones/smart phones are prohibited in the classroom. Please turn them off! A laptop is ok for taking notes, but not using the internet during class. A student found using a phone or internet on their laptop or ipad during class time is subject to a deduction from their participation score. Continued use of a cell phone or internet or any other disrespectful behavior may result in your immediate removal from class. If you must take a call, notify me that you are in an emergency situation at the start of the class, and set your phone to silent mode, excuse yourself and receive the call outside of the classroom.

Dedicate yourself. Commit to giving it your best each and every day. Manage your time. Refuse to give up until you find success!

Topics by Week

	Topic	Readings	Homework Due	Case Studies	Papers
Week 1	Welcome, UB Curriculum program; Global Warming basics	IPCC Report, Summary for Policy Makers			
Week 2	College research and study skills; future warming, models and data	online sources, IPCC Report	Homework 1; calendar check	Case Study 1	
Week 3	Climate change forcings; UB library visit	IPCC Report			
Week 4	Arctic Warming; e portfolio tutorial	Arctic Climate Change Impact Assessment Report; Chasing Ice film	Homework 2		
Week 5	Sea Level Rise and Superstorm Sandy	New York Times; National Geographic		Case Study 2	
Week 6	Climate Change in the NE US	NE US Climate Change report			
Week 7	Snowpocalypse/Buffalo	Scientific articles from Nature Geoscience	Homework 3; calendar check		Short paper topics
Week 8	Global warming is a hoax; climate change funding	Bradley: Global Warming and Political Intimidation			
Week 9	Hockey stick and climate gate	Bradley: Global Warming and Political Intimidation	Homework 4		
Week 10	Climate Engineering	Online sources		Case Study 3	
Week 11	Climate change research: how it's done at UB	UB Climate Group publications	Homework 5		
Week 12	Student research topics, research methods, power point	scientific article of choice			Short paper articles
Week 13	Winter Break		Homework 6		
Week 14	Student research topics, peer discussion; presentation	scientific article of choice			Short paper pilot presentation
Week 15	Debating climate change			Case Study 4	Short paper due
Final Exam Period					