IDS 2935: Climate Change Economic Impacts, Damages, and Policies

Quest 2

I. Course Information

Spring 2023

Meeting Day/Time/Location: Tuesdays 1:55 PM - 3:50 PM ARCH 0215 and
Thursdays 1:55 PM - 2:45 PM AND 0032

Attendance is required and part of your grade.

Primary General Education Designation: Social & Behavioral Sciences

Secondary General Education Designation: International (N)

Writing Designation: No writing designation

A minimum grade of C is required for general education credit

Instructor

Dr. Michelle Phillips – michellephillips@ufl.edu

Office location: 336 Matherly Hall

Office hours: Tuesdays 11:20am-12:10pm in MAT 336
Thursdays 11:20am-12:10pm in MAT 336
Thursdays 3-3:50pm in MAT 336

Phone: (352) 392-5017

Course Description

This class will ultimately tackle the question: What are the causes and societal costs of global climate change? Along the way, several related questions will be asked and addressed: what are the economic damages from climate change?, how do we measure them?, what are the expected impacts and monetary implications of these impacts?, what are the impacts of current policies?, and how are countries addressing climate change? This class examines the relationship between humans and the environment, with a focus on climate change and emissions policy. Students will study interdisciplinary topics touching the fields of economics, political science, law, science, and marketing. Topics covered include: the science behind climate change (science), perceptions about climate change (marketing), fossil fuel subsidies (economics), approaches to mitigation, adaptation, and geoengineering (economics and engineering), the legal basis for greenhouse gas mitigation in the United States (law) and the political economy of climate change votes in the US government (political science).

General Education Designation and statement

Social and Behavioral Sciences (S)

Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences. Students will learn to identify, describe and explain social institutions, structures or processes. These courses emphasize the effective application of accepted problem-solving techniques. Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes or human behavior. Students are expected to assess and analyze ethical perspectives in individual and societal decisions.

International (N)

International courses promote the development of students' global and intercultural awareness. Students examine the cultural, economic, geographic, historical, political, and/or social experiences and processes that characterize the contemporary world, and thereby comprehend the trends, challenges, and opportunities that affect communities around the world. Students analyze and reflect on the ways in which cultural, economic, political, and/or social systems and beliefs mediate their own and other people's understanding of an increasingly connected world.

Required & Recommended Course Materials (to purchase/rent)

Required textbook: "The Climate Casino: Risk, Uncertainty, and Economics for a Warming World" by William Nordhaus. ISBN: 978-0300212648. Note: Any version of the textbook works (hardcopy, paperback, or e-book).

Additional readings and short videos will be posted in Canvas and will be available free of charge.

Additional Reading Materials and Videos (provided by instructor)

A three-decade long water dispute heads to the supreme court. NPR. January 7, 2020. *Multidisciplinary (Law and Economics).

Archsmith, James, Anthony Heyes, and Soodeh Saberian. 2018. Air quality and error quantity: pollution and performance in a high-skilled, quality-focused occupation. Journal of the Association of Environmental and Resource Economists. Volume 5, Number 4. *Multidisciplinary (Sports Economics)

Auffhammer, Maximilian and Catherine Wolfram. 2018. Bitcoins Should Be Called BTUcoins, and That's a Problem. UC Berkeley Energy Blog.

Before the Flood. 2016. National Geographic. *Multidisciplinary (Economics, Law, Science). (If time permits)

Coady, David, Ian Parry, Nghia-Piotr Le, and Baoping Shang. IMF Working Papers. 2019. Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates.

Davis, Lucas. Energy Efficiency Talk. UC Berkeley. https://www.youtube.com/watch?v=R9JPajdB1JA

Fiscal policies for Paris Climate Strategies: From principle to Practice. IMF. 2019.

Florida's Energy Future. Bob Graham Center. 2015. https://vimeo.com/140829317

From Paris to Pittsburg. 2018. National Geographic. *Multidisciplinary (Economics, Law, Science).

Global Warming (NASA earth observatory) video. https://www.youtube.com/watch?v=ZzCA60WnoMk *Multidisciplinary (Science).

How do ice cores allow researchers to look at global climate change? (University of Maine) https://www.youtube.com/watch?v=kKVqEnFVSCU&feature=youtu.be *Multidisciplinary (Science).

Ice core data (Associated Press) https://www.youtube.com/watch?v=-lQvULoG25o&feature=youtu.be *Multidisciplinary (Science).

Ice on Fire. HBO. 2019. *Multidisciplinary (Economics, Law, Science).

Jayachandran, Seema. 2018. Thinking Globally to Mitigate Climate Change: Paying Local Communities to Protect Forests. J-Pal. https://www.youtube.com/watch?v=_MvE7GVrOLc&feature=youtu.be

Jouzel, J. 2004. EPICA Dome C Ice Cores Deuterium Data. IGBP PAGES, World Data Center for Paleoclimatology, Data Contribution Series # 2004 - 038. NOAA/NGDC Paleoclimatology Program, Boulder CO, USA. doi: 10.3334/CDIAC/cli.007 *Multidisciplinary (Science).

London Cholera Outbreak: Early data visualizations (Duke University). https://www.youtube.com/watch?v=w04vfJCwb_s&list=PL1M5TsfDV6Vui-q_q1Bq5kF2Y77udGwWx&index=28 *Multidisciplinary (Epidemiology, Statistics).

Nordhaus, William. 2017. Projections and Uncertainties About Climate Change in an Era of Minimal Climate Policies. NBER.

PBS News Hour. As climate change parches Somalia, frequent drought comes with conflict over fertile land. https://www.pbs.org/newshour/show/as-climate-change-parches-somalia-frequent-drought-comes-with-conflict-over-fertile-land

Ted Talk: Esther Duflo: Social experiments to fight poverty. https://www.youtube.com/watch?v=0zvrGiPkVcs

Yale Climate Opinion Map. https://climatecommunication.yale.edu/visualizations-data/ycom-us/
*Multidisciplinary (Marketing).

Zheng, Siqi and Matthew E. Kahn. 2017. A New Era of Pollution Progress in Urban China? Journal of Economics Perspectives. Volume 31, Number 1, Winter 2017, Pages 71–92

II. Coursework & Schedule

1. List of Graded Work

Assignment	Description	Requirements	Points
Weekly In-Class Quizzes	Quizzes will be taken on Canvas and will cover videos and material from each week's classes.	Closed book; open note	30% total
Experiential Learning Report	Option 1: Students will survey or review a local business and identify ways that the business could reduce its carbon footprint. Students will estimate the costs of proposed mitigation strategies. Option 2: Students will analyze a firms' sustainability reports (if available) and propose changes. If sustainability reports are not available, students will create a sustainability business plan for the firm.	Described during lecture and in printed guidelines that will be shared with the class	20%
Experiential Learning Presentation	Students will present their experiential learning project to the class.	Described during lecture and in printed guidelines that will be shared with the class	10%
Reflection Activity and Report	Students will conduct a self-assessment of their own carbon footprint and identify ways to reduce their own contribution to emissions. They will write a 2000-word report. See Canvas for more details.	Described during lecture and in printed guidelines that will be shared with the class	10%
Attendance (Discussions)	Attendance is mandatory. Students will participate in in-class discussions every week. These discussions will focus on understanding the material covered during the week. For example, one of the topics examined is adaptation. The discussion that day will consist on giving students a scenario and asking them what adaptation techniques can be used in that scenario. Students will work in groups and introduce the instructor and their classmates to their ideas. Absences can be excused with documentation of a conflict or activity that is explicitly listed in the UF Attendance Policy.	See Below	30%

2. Weekly Course Schedule.

Module	Lecture and/or Activity	Read and due dates
1	Tuesday, January 10 • Orientation and syllabus • Overview of global greenhouse gas emissions and the economy, legal context. • Group discussion: bitcoin and energy use	Read: Syllabus, Course overview, Climate Casino Chapter 1. **Due:** • Group in class discussion: Bitcoin and upload to Canvas (due Jan 10)
1	Thursday, January 12 • Overview of global greenhouse gas emissions and the economy, legal context (continued) • Quiz Module 1	Optional: Skim Coady et al. 2019. **Due:** • Quiz Module 1 (due Jan 12)
2	Tuesday, January 17 • Pollution statistics for selected countries in the Americas/Caribbean, Africa, Asia, Oceania, and Europe (ex: Argentina, China, Ethiopia, Germany, Iran, UAE) • Fossil Fuel Subsidies around the world. • Global Energy subsidies by region (Sub-Saharan Africa, Latin America, Middle East and North Africa, etc) • Environmental Gains from removing energy subsidies by region • Group discussion: water wars • Prepare for next week's meeting	Read: Experiential group assignment guidelines **Due:** • Prepare for group meeting on next Tuesday. Summarize your progress and upload to Canvas. Brainstorm (due Jan 18) • Group in class discussion: Water wars and upload to Canvas (due Jan 17)
2	Thursday, January 19 • Watch first half (first 50 minutes) of Ice on Fire and take notes (quiz to follow on Tuesday). Topics covered on the documentary include: Measuring gases in Colorado, Iceland's current situation, Arctic circle, Santa Rosa fires, Redwood Forest, and direct air capture in Switzerland.	Read: None **Due:** • No quiz today but the material from today's class is part of the Ice on Fire quiz next week

3	Tuesday, January 24 • Experiential learning assignment team meeting 1 • Watch second half of Ice on Fire (last 50 minutes)	Read: Climate Casino Chapter 2 Due: • Summary of experiential learning assignment meeting 1 upload on Canvas (due Jan 28)
3	**Thursday, January 26** **Note: Today's lecture is online. Please log into Module 3 and follow the instructions** • Why is climate change an economic problem? • Why solutions are difficult given economic incentives • Electricity across the USA • Country energy differences with a focus on islands, mining countries, countries with differing levels of infrastructure. Examples from Curacao and Chile solar power. • Quiz Module 3	Read: Climate Casino Chapter 3 **Due:** • Quiz Module 3 (due Jan 26)
4	Tuesday, Jan 31 • Decarbonization • Carbon intensity by state in the USA • Modelling • How to predict future climate change • Simple climate equation • Greenhouse effect • Integrated Assessment models: DICE model • Quiz Module 4	Read: None **Due:** • Quiz Module 4 (due Jan 31)
4	Thursday, February 2 • Projections • Public goods • Model assumptions • Group discussion: Decarbonization	Read: Ice Core readings linked on Canvas, Climate Casino Chapter 4 **Due:** • Group in-class Discussion: Decarbonization and upload to Canvas (due Feb 2)

5	Tuesday, February 7 • Unexpected policy consequences: Alberta, Canada energy case study • Science behind climate change • Atmospheric CO2 concentration • Climate models and science • Climate change projections • Temperature projections • Quiz Module 5	Read: None. **Due:** • Quiz Module 5 (due Feb 7)
5	Thursday, February 9 • Experiential learning assignment team meeting 2	Read: Climate Casino Chapter 5 **Due:** • Upload a summary of your 2nd group meeting discussion and next steps to Canvas (due Feb 13)
6	Tuesday, February 14: • Variability of past climates • Example of economic tipping points from Greece and the USA. • Climate change tipping point examples: Greenland and West Antarctica ice sheets, changes in ocean circulation (Gulf Stream), and others. • Ice core data • Reflection assignment in-class activity	Read: None **Due:** • Reflection assignment (due Feb 25)
6	Thursday, February 16 • Fleeing climate change featuring cases from: Africa (Sahel region), Indonesia and Russia • Quiz Module 6	Read: Climate Casino Chapter 6 **Due:** • Quiz Module 6 (due Feb 16)
7	Tuesday, February 21 • Feedback effects • Public goods • Quiz Module 7	Read: None **Due:** • Quiz Module 7 (due Feb 21)
7	Thursday, Feb 23 • Experiential learning assignment team meeting 3	Read: None **Due:** • Upload a summary of your 3nd group meeting discussion and next steps to Canvas (due Feb 27)

8	Tuesday, Feb 28 • Discuss reflection assignment in groups then summarize • Coastal and inland dweller public goods exercise • From Climate Change to Impacts: Managed and Unmanaged Systems. • Ecological Collapse	Read: Climate Casino Chapters 7 and 8 **Due:** • Nothing
8	Thursday, March 2 • "Saving the Amazon" documentary • Quiz Amazon documentary	Read: **Due:** • Quiz Amazon documentary (due March 2)
9	Tuesday, March 7 Fate of Farming and Impact on Human Health • Farming effects in Africa and Western Asia • Climate change health impacts in Africa and High Income countries • Randomized experiments in economics • Quiz Module 9	Read: Climate Casino Chapters 9 and 10 **Due:** • Quiz Module 9 (due March 7)
9	Thursday, March 9 • Experiential learning assignment team meeting 4	Read: Climate Casino Chapters 11 and 12 **Due:** • Upload a summary of your 4th group meeting discussion and next steps to Canvas (due March 13)
10	Tuesday, March 21 • Unmanageable risks: Perils for the Oceans, Predictions and Concerns. Intensification of Hurricanes • Countries at risk from sea level rise due to location and countries with largest amount of population at risk • Environmental migration across countries and its expected effects. • Hurricane economic damages across regions of the world (Central America, North America, East Asia, etc) • Case Study: Small Island Developing Nations. • Caribbean island's approaches to energy • Group in-class discussion: CO2 per capita Negotiations	Read: **Due:** • Group in-class discussion: CO2 per capita Negotiation (due March 21)

10	Thursday, March 23 • In class group activity: Yale climate opinion map (opinions and perceptions about climate change)	Read: Climate Casino Chapters 13 and 14 **Due:** • In class group activity: Yale climate opinion map (due March 23)
11	Tuesday, March 28 • Wildlife and species loss • Calculations of expected worldwide losses • Valuation of environmental goods • Adding up the damages from climate change • Dealing with Climate Change: Adaptation and Geoengineering • Example from volcano eruption in the Philippines • Thinking globally to mitigate climate change (example from Uganda)	Read: Climate Casino Chapters 15 and 16 Due: • None
11	Thursday, March 30 • Experiential learning assignment team meeting 5: Wrap up your project.	Read: Climate Casino Chapters 17 and 18 Due: • Upload a summary of your 5th group meeting discussion and next steps to Canvas (due April 3)
12	Tuesday, April 4 • Somalia adaptation example • Climate Change Mitigation • Costs of slowing down climate change: economic and engineering approach. • Quiz Module 12	Read: Climate Casino Chapters 19 Due: • Quiz Module 12 (due April 4)
12	Thursday, April 6 • Worldwide cost reduction estimates • Submit completed experiential learning project • Submit completed peer review for experiential learning project	Read: Climate Casino Chapters 20 and 21 Due: • Completed experiential project (due April 10) • Completed peer review (due April 10)

13	Tuesday, April 11 • Climate policy by balancing costs and benefits • The Central Role of Carbon Prices • Carbon taxes across the world • The European Trading Scheme (ETS) • Discussion: Carbon price calculator • Quiz Module 13	Read: Nordhaus Chapters 22 and 23 Due: • Quiz Module 13 (due April 11)
13	Thursday, April 13 • Carbon pricing calculator in class discussion	Read: None Due: • Discussion Carbon price calculator (due April 13)
14	Tuesday, April 18 • Cap and Trade (continued) • Carbon prices • Economics of R&D • Climate Club (country-level cooperation) • Read about: Examples of select countries' Paris Climate Accord strategies	Skim (reading is not required, skimming is optional): Fiscal policies for Paris Climate Strategies: From principle to Practice. IMF document (linked on powerpoint slide) Due: • None
14	Thursday, April 20 • Experiential Learning Presentations 1 (2 presentations) • Quiz Module 14	Read: None Due: • Quiz Module 14 (due April 20) • Experiential Learning Presentation Quiz 1 (due April 20)
15	Tuesday, April 25 • Experiential Learning Presentations 2 (5 presentations)	Read: None Due: • Experiential Learning Presentation Quiz 2 (due April 25)

Note: We may cover some material slower or faster than the schedule depending on the pace of the lectures and circumstances. If we have time left over, we will cover additional topics. Possible additional topics include pollution in baseball, expected effects in larger ocean animals, pollution in China, and energy efficiency.

****** Please use the Canvas Modules for more up to date information on exactly what will be covered on each class. The Canvas Modules will be updated regularly to keep up with the course pace.***

III. Grading

1. Statement on Attendance and Participation

Attendance and Participation:

Attendance is mandatory. Absences can be excused with documentation of a conflict or activity that is explicitly listed in the UF Attendance Policy.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

The participation portion of your grade for this class will be calculated on the basis of your attendance and your participation in class activities. Since the pedagogical approach of this course depends heavily on student engagement and interaction, you are required to participate in class activities. **You must bring a laptop to each lecture.**

2. Grading Scale

For information on how UF assigns grade points, visit: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Name:	Range:	
A	100 %	to 94.0%
A-	< 94.0 %	to 90.0%
B+	< 90.0 %	to 87.0%
B	< 87.0 %	to 84.0%
B-	< 84.0 %	to 80.0%
C+	< 80.0 %	to 77.0%
C	< 77.0 %	to 74.0%
C-	< 74.0 %	to 70.0%
D+	< 70.0 %	to 67.0%
D	< 67.0 %	to 64.0%
D-	< 64.0 %	to 61.0%
F	< 61.0 %	to 0.0%

2. Grading Rules

- Any complaints about grading should be submitted within 2 weeks of the item being graded.
- Late submissions for assignments will be penalized as follows: 1-day-late penalty of 50% of total grade (maximum grade possible is 50/100), 2-day-late penalty of 75% of total grade (maximum grade possible is 25/100), 3-day-late penalty of 90% of grade (maximum grade possible is 10/100). Assignments won't be accepted past the 3rd day.
- Quizzes can be retaken only with an excused absence where the absence occurred for the entire time the quiz was open and a letter from the DSO verifying the absence.

IV. Quest Learning Experiences

1. Details of Experiential Learning Component

Students write a plan for how a business could reduce its carbon footprint by analyzing the firm's sustainability report if they have one. If the firm does not have a sustainability report you will create one. The plan should include a list of initiatives and an estimate of the cost of introducing these initiatives. Students will write a 5-10 paper outlining the specific initiatives and any obstacles they believe firms may face in implementing these initiatives.

All students will submit a group report and present their plan or survey to the class during the last weeks of the term. Detailed assignment instructions will be given during lecture and provided in printed handouts. 10% of each student's group grade will be based on filling out a peer review form of each team members' participation to prevent free-riding.

2. Details of Self-Reflection Component

All students will complete a self-assessment of their own carbon footprint and identify meaningful ways to reduce it. Generally speaking, this reflection activity consists of four steps:

1. Calculate your carbon footprint using the Nature Conservancy and the EPA's calculators.
    - https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/
    - https://www3.epa.gov/carbon-footprint-calculator/
2. Choose 3 ways to reduce your carbon footprint from the options offered by the EPA calculator and recalculate your carbon footprint under the assumption that you follow through with your 3 ideas.
3. Write a report. Include the following:
    - A print out of the results from each calculator
    - A list of the 3 reductions you calculated. Explain why you chose to reduce your footprint this way and the amount by which your footprint calculation as reduced.
    - A list of 3 reductions not available on the EPA website that you would consider incorporating into your daily life.
4. Be ready to discuss your results and report in class.

More detailed assignment instructions will be given during lecture and provided in a printed handout.

In class discussions will also include self-reflection components which will address the material being covered. For example, during the carbon tax section, students will discuss in which ways a carbon tax would affect them.

V. General Education and Quest Objectives & SLOs

1. This Course's Objectives—Gen Ed Primary Area and Quest

Social and Behavioral Sciences Objectives ➔	**Quest 2 Objectives ➔**	**This Course's Objectives ➔** (This course will….)	**Objectives will be Accomplished By:** (This course will accomplish the objective in the box at left by…)
Social and behavioral science courses provide instruction in the history, key themes, principles, terminology, and underlying theory or methodologies used in the social and behavioral sciences.	Address in relevant ways the history, key themes, principles, terminologies, theories, or methodologies of the various social or biophysical science disciplines that enable us to address pressing questions and challenges about human society and/or the state of our planet.	… draw on social science tools to propose solutions to the carbon footprint of local businesses.	… connecting emissions to the seemingly self-interested decisions of individual's and firms' through the use of incentives such as carbon taxes or programs such as tradable permits.
Students will learn to identify, describe and explain social institutions, structures or processes.	Present different social and/or biophysical science methods and theories and consider how their biases and influences shape pressing questions about the human condition and/or the state of our planet.	… explain the human decisions that have contributed to global climate change with an emphasis on the national and international laws and regulations that shape individuals' and firm's incentives to pollute.	… identifying individual national laws and international treaties that create the legal landscape governing polluting activities, … understand how carbon taxes and tradable permits work, ….and applying the cost-benefit approach that underlies economic analyses of individual decisions and societal wellbeing.

Social and Behavioral Sciences Objectives ➔	**Quest 2 Objectives ➔**	**This Course's Objectives ➔** **(This course will….)**	**Objectives will be Accomplished By:** **(This course will accomplish the objective in the box at left by…)**
These courses emphasize the effective application of accepted problem-solving techniques.	Enable students to analyze and evaluate (in writing and other forms of communication appropriate to the social and/or biophysical sciences) qualitative or quantitative data relevant to pressing questions concerning human society and/or the state of our planet.	… understand the cost-benefit approach that underlies economic analyses of individual decisions and societal wellbeing, … and demonstrate how this analysis explains the continued prevalence of emissions that are known to contribute to global climate change, environmental decay, and human suffering.	… presenting economic methodologies for studying individual behavior, … understanding several national and international consequences of global climate change, … and discussing national and international policies aimed at reducing emissions.
Students will apply formal and informal qualitative or quantitative analysis to examine the processes and means by which individuals make personal and group decisions, as well as the evaluation of opinions, outcomes or human behavior.	Analyze critically the role social and/or the biophysical sciences play in the lives of individuals and societies and the role they might play in students' undergraduate degree programs.	… demonstrate that individual and firm decisions create global climate change.	…identifying the primary national and international sources of global carbon and Sulphur emissions, …identifying the emissions contributions of local firms and proposing mitigation strategies, …and identifying personal carbon footprints and proposing behavioral changes that can

Social and Behavioral Sciences Objectives ➔	Quest 2 Objectives ➔	This Course's Objectives ➔ (This course will….)	Objectives will be Accomplished By: (This course will accomplish the objective in the box at left by…)
			reduce individual emissions contributions.
Students are expected to assess and analyze ethical perspectives in individual and societal decisions.	Explore or directly reference social and/or biophysical science resources outside the classroom and explain how engagement with those resources complements classroom work.	… facilitate self-reflection of students' own carbon footprints and thus their contribution to global climate change, environmental decay, and human suffering.	… pursuing a carbon footprint self-assessment, … and identifying ways to mitigate that footprint.

2. This Course's Student Learning Outcomes (SLOs)—Gen Ed Primary Area and Quest

	Social and Behavioral Sciences SLOs ➔ Students will be able to…	Quest 2 SLOs ➔ Students will be able to…	This Course's SLOs ➔ Students will be able to…	Assessment Student competencies will be assessed through…
Content	**Identify, describe, and explain** the history, underlying theory and methodologies used.	**Identify, describe, and explain** the cross-disciplinary dimensions of a pressing societal issue or challenge as represented by the social sciences and/or biophysical sciences incorporated into the course.	**Identify, describe, and explain** the national and international policies and regulations governing global climate emissions, the standard cost-benefit analysis employed in economic assessments of global climate change, environmental decay, and human suffering.	Class participation, In-class Activities and Quizzes

	Social and Behavioral Sciences SLOs ➔ Students will be able to…	Quest 2 SLOs ➔ Students will be able to…	This Course's SLOs ➔ Students will be able to…	Assessment Student competencies will be assessed through…
Critical Thinking	**Identify and analyze** key elements, biases and influences that shape thought within the subject area. Approach issues and problems within the discipline from multiple perspectives.	**Critically analyze** quantitative or qualitative data appropriate for informing an approach, policy, or praxis that addresses some dimension of an important societal issue or challenge.	**Analyze** and **Evaluate** global carbon and sulphur emissions data, national and international trends in emissions data, and the legal and regulatory environment that shapes individuals' and firms' incentives to emit.	Class participation, In-class Activities and Quizzes
Communication	Communicate knowledge, thoughts and reasoning clearly and effectively.	**Develop and present**, in terms accessible to an educated public, clear and effective responses to proposed approaches, policies, or practices that address important societal issues or challenges.	**Develop** and **Present** a environmental impact analysis and carbon mitigation plan for a local business.	Experiential Learning Report, Experiential Learning Presentation
Connection	N/A	**Connect course content** with critical reflection on their intellectual, personal, and professional development at UF and beyond.	**Connect course content** to personal decisions by conducting self-assessments of each student's own carbon footprint.	Class participation, Reflection Report

3. This Course's Student Learning Outcomes (SLOs)—International Studies

	International SLOs ➔ Students will be able to…	This Course's SLOs ➔ Students will be able to…	Assessment Student competencies will be assessed through…
Content	**Identify, describe, and explain** the historical, cultural, economic, political, and/or social experiences and processes that characterize the contemporary world.	**Identify, describe, and explain** the national and international policies and regulations governing global climate emissions, the standard cost-benefit analysis employed in economic assessments of global climate change, environmental decay, and human suffering.	Class participation, In-class Activities and Quizzes

	International SLOs ➔ Students will be able to…	This Course's SLOs ➔ Students will be able to…	Assessment Student competencies will be assessed through…
Critical Thinking	**Analyze and reflect on the ways** in which cultural, economic, political, and/or social systems and beliefs mediate understandings of an increasingly connected contemporary world**.**	**Analyze** and **Evaluate** global carbon and Sulphur emissions data, national and international trends in emissions data, and the legal and regulatory environment that shapes individuals' and firms' incentives to emit. **Evaluate** country-level data regarding GHG emission, pollution, and subsidies globally. Analyze differences across pollution and pollution-reduction strategies. **Analyze** country case studies of areas where climate change adaptation is occurring. **Evaluate** international cooperation agreements such as the Paris Accord and UN Forest initiatives. Understand international free-riding incentives. **Analyze** carbon taxes and tradable permit regulations across countries.	Class participation, In-class Activities and Quizzes

VI. Required Policies

1. Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

2. UF Evaluations Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

3. University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

4. Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: https://counseling.ufl.edu/

(352) 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

5. The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at http://writing.ufl.edu/writing-studio/ or in 2215 Turlington Hall for one-on-one consultations and workshops.