

Honors Course in Climate Change: An Interdisciplinary, Global Approach

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Interdisciplinarity

- Recruitment of students from all majors:
 - Biology
 - Psychology
 - Business
 - Chemistry
 - Political Science
 - Physics
 - Communications
 - Journalism

“Climate Change: Global Challenge, Local Impact” | Fall '16 – Spring '17

Co-Instructors:



Dr. Juan Carlos Espinosa

International Relations,
Political Science



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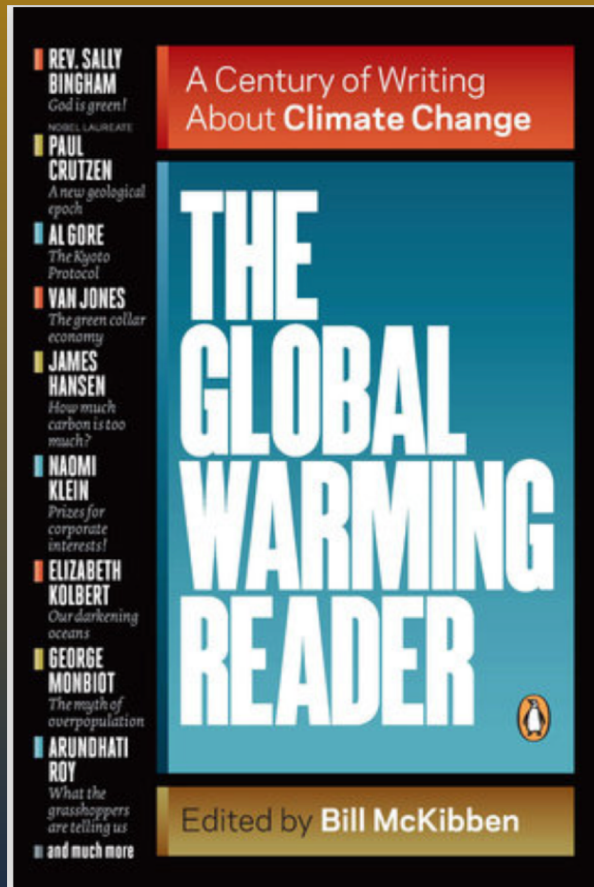
Atmospheric
Science,
Interdisciplinary
Studies



Aranza Venegas

International Business,
Finance

Required Text



Bill McKibben, ed. *The Global Warming Reader: A Century of Writing About Climate Change*, Penguin Books, 2012, ISBN: 978-0143121893

Global Learning for Global Citizenship

- **Global Awareness:** Students will be able to demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems.
- **Global Perspective:** Students will be able to conduct a multi-perspective analysis of local, global, international, and intercultural problems.
- **Global Engagement:** Students will be able to demonstrate a willingness to engage in local, global, international, and intercultural problem solving.

Course Objectives

1. Students will understand the basics of climate change, including human impact on the climate, atmospheric circulation, ocean circulation, the greenhouse effect, paleoclimates, and regional and global trends.

- S1 Week 2:
 - **Lecture:** Weather vs. Climate
- S1 Week 4:
 - **Lecture:** Temperature and 'Global Warming'
 - **Lecture:** Paleoclimates
- S1 Week 5:
 - **Lecture:** Changes in Landscape
- S1 Week 8:
 - **Lecture:** Extreme Weather

Course Objectives

2. Students will analyze multiple local, global, international, and intercultural problems surrounding climate change from multiple perspectives, including climate change denial, media portrayal, and political viewpoints, international agreements, and religious beliefs.

- S1 Week 2:
 - **Watch** *An Inconvenient Truth* Documentary
 - **Write** Student Essay: Do we really have to change? Can we change? Will we change?
- S1 Week 5:
 - **Lecture:** Economic impact, human health, culture and society, domestic and global politics
- S1 Week 6:
 - **Present:** Pecha Kucha

Course Objectives

3. Students will demonstrate knowledge of the interrelated impacts of climate change on a local, global, international, and intercultural scale such as public health, agriculture, and terrestrial/marine ecosystems.
 - S1 Week 6:
 - **Present:** 10-slide Pecha Kucha on social impacts of climate change
 - **S2 South Florida Changing Project**

Course Objectives

4. Students will understand climate change projections and mitigation efforts through on-site engagement in local projects based on regional trends and multi-media that address global problems in an investigation of the aesthetics, values, and authority of climate change.
 - S1 Week 7:
 - **Field Trip:** Miami Beach, FL
 - **S2 South Florida Changing Project**

Course Objectives

5. Students will understand solutions to climate change including sustainability and geoengineering, while considering the ethics, urgency, and many unknowns of climate changes.
- **S2 South Florida Changing Project**

Requested Subjects (S2)

- Climate Art: Xavier Cortada, Guest Speaker
- Climate Fiction: Student presentations of short story reviews

South Florida Changing

- A study of South Florida as it lives through climate change with particular focus on assigned topics:
 - *Aedes Aegypti* mosquito (Zika)
 - Tomatoes in Homestead, FL (yields), etc.
- Requires creation of a field report, media (video, PPT, artwork, etc.), data visualization
- **Extra Credit:** Poster projects presented at the annual Conference for Undergraduate Research at FIU (CURFIU)