

Anthropogenic Climate Change

Course Syllabus

Mongolian Young Scholars Program – 2016

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Course Overview:

Anthropogenic (human-caused) climate change directly and indirectly affects almost, if not all populations and ecosystems around the world, including Mongolians, so it is important for young people to know what climate change is, why it presents many problems, and what they can do to mitigate it. Students will gain some introductory knowledge about the natural processes and human actions that contribute to climate change, such as natural climate variability, fossil fuel consumption, and overpopulation. This class will also discuss innovations in technology that have helped mitigate the effects of these recent changes, and the efficacy of recent policy agreements. This course will aim to instill in the students a basic understanding of anthropogenic climate change, recent international policy regarding climate change, mitigation strategies (i.e. renewable energy) and the state of the environment/environmentalism in Mongolia.

Throughout the seminar, there will be daily readings assigned about the topics mentioned above, as well as peer reviewing sessions to prepare for the final project, which will consist of a 1-page analytic paper about assigned stakeholders (individual countries and their motivations, arguments, concessions), and their relationship to each other in the context of the Paris climate agreements, as well as a poster presentation. The poster will be a collaboration effort, and must include each participants' stakeholders, and present them in a way that informs the audience of some countries' places in climate mitigation (policy-wise, at least). Although this course will not be able to exhaustively cover every factor of climate change, students will hopefully become more invested and likely to positively contribute, and gain a basic understanding upon which they can build more knowledge should they choose so.

By the end of this seminar, students should be able to answer questions such as:

- What is climate change? What is global warming? What is the difference, and why is it such a big deal?
- What are some mitigation strategies and solutions proposed in recent years?
 - Renewable energy, sustainability, etc.
- How do I contribute to decreasing the effects of climate change?
- What are different countries' response to climate change?
- Where does Mongolia stand on the global spectrum?
- How can we use what we've learned to shape our own understanding of the relationship between humans and the environment?

SCHEDULE

Day 1

1. Introduction to course/final project (group project + final paper)
2. Introduction to environment
 - a. What is anthropogenic climate change? What is global warming?
3. Discussion – human influence
4. IPCC video
5. Write for 10 mins – (about reading/expectations, thoughts from discussion, predictions for remainder of course)

HW: Reading: IPCC report (skim)

Panel's warning on climate

Day 2:

1. Reading discussion/analysis/writing
2. Mitigation – policy, technology, sustainability
 - a. What can we do as individuals?
 - b. Calculate carbon footprint
 - c. Paris agreement
3. Introduce final paper – assign stakeholders

HW: Reading – Paris agreement

Individual stakeholder readings

Day 3:

1. Reading discussion (about readings for final paper)/writing
2. In class reading/discussion – Oregon youth sues government
3. Writing workshop/exercise (outlining, basic structure, organization)

HW: Individual stakeholder readings

Finish first drafts of final paper

Day 4:

1. Reading discussion/writing
 - a. Final papers
2. Peer review strategies
3. Peer review each other's papers
4. Policy agreement regarding climate change

HW: Reading – Mongolia – climate assessment

Finish final papers

Day 5:

1. Reading discussion/writing
 - a. What has been done in Mongolia, and what can we do?
 - b. Environmentalism in Mongolia
2. What are the impacts future climate change? What are some pathways for adaptation and mitigation?
3. Turn in final paper
 - a. Summarize main points of paper/stakeholder to include in poster

HW: IPCC synthesis report – future climate change, mitigation and adaptation