Climate, Society and the Humanities

CAS NS 331 (4 credits)

Course Catalog Description

Survey of climate literature across humanities and social science disciplines. Explores interpretive and comparative approaches to understanding human-climate interactions in maritime contexts and identifies collaborative potential with the natural sciences. Requires interdisciplinary research, field journal writing, and team projects.

Instructors: Sea Education Association Maritime Studies Faculty; Visiting Scholars

Location: SEA campus in Woods Hole, MA, on shore at field sites and port stops, and aboard SEA sailing school vessel at sea.

Prerequisites: Admission to SEA Semester. Junior standing or consent of instructor.

Course Philosophy and Approach:

In this course, students will explore the role of the humanities and social sciences in understanding, articulating, and resolving issues of climate-driven impacts on human lives and societies, with a focus on maritime communities and marine environments. The course offers a broad overview of relevant literature to assess the contributions of archaeology, history, anthropology, sociology, political science, philosophy, economics, psychology, literature and the visual arts to advancing climate change research. Students will gain the knowledge and skills necessary to address some of the most urgent questions facing humans in the era described (and contested) as the Anthropocene. Through original research they will contribute to our understanding of the role of human actions and ideas within the context of shifting planetary and oceanic processes. The course provides a framework for examining climate change as a novel problem that requires the interpretive and comparative approaches of the humanities and social sciences to complement scientific research and theory.

At our campus in Woods Hole students will find a class schedule that is familiar to them from their home campuses. Days are divided into lectures, discussions, and workshops. Aboard the ship there are two formats for class: a daily meeting at 1400 with all hands, and an in-watch class with the morning watch. (The watch rotation will bring each student to this class every third day.) On shore at field sites remote from Woods Hole and at port stops during the sea component there will be organized tours, workshops and lectures, and time to explore and follow up on research opportunities. The faculty and local experts will help students develop a plan to take best advantage of time in the field and in port. The course consists of 21 hours of lectures, 14 hours of directed workshops, 16 hours of topic/reading discussions, 12 hours of

student presentations, 8 hours of field trips, and 4 hours of project development meetings with faculty and fellow students.

Learning Objectives:

1. Gain knowledge of emerging interpretive and comparative frameworks for understanding and communicating climate impacts on human lives and societies.
2. Learn to test new knowledge and skills against observations of land- and seascapes, the built environment, and the ideas and practices of local people.
3. Practice communication skills through oral presentations, both in the early stages of research where ideas are tested, and at the conclusion of a project, where a mastery of the material is demonstrated.
4. Contribute to our understanding of the human-environment relationship by exploring and advancing connections between the humanities and social sciences and the natural sciences.

Evaluation:

Interdisciplinary Solutions Paper (including Annotated Bibliography and Literature Review)	30%
Team Presentation 1 (On Shore)	10%
Reading Response Paper	10%
Team Presentation 2 (At Sea)	10%
Journal Entries and Presentation (At Sea)	30%
Class Participation	10%

Assignments:

Interdisciplinary Solutions Paper

Each student will select an academic discipline within the humanities and social sciences and produce a five-page "state of current research" literature review that summarizes the range of theories, ideas, and methodologies employed by the discipline in its exploration of climate change. For the first milestone, students will produce an annotated bibliography of five sources and submit it to the course instructor at the end of week two. The second milestone will be the five-page literature review, submitted to the instructor in week four.

The instructor will then place students into teams of two (or three if necessary), identifying pairs of students who selected different disciplines for their literature review. Each team will receive a list of climate-related issues (e.g., technological solutions to climate change, social dimensions of coastal resilience policy, resolving the Anthropocene boundary debate). For the

third milestone, each team will choose one issue from the list and develop a cross-disciplinary collaborative vision or "blueprint," recommending viable paths forward for climate change researchers in the represented disciplines. The five-page team paper is due at the end of week six. The annotated bibliography, five-page literature review, and five-page collaborative vision paper are each worth 10% of the final course grade.

Team Presentation on Shore

Students will work in teams of two or three to develop and present a brief (12-15 minutes) in-class talk focused on the social and cultural impacts of climate change on human communities in the Pacific Islands or Atlantic/Caribbean regions. The objective of the assignment is to apply theories and ideas learned in class to analyses of contemporary climate change issues relevant to the program destination. Students will be graded as a team for organization and presentation, and for a two-page summary submitted to the course instructor. The instructor will guide students in the development of their topic and presentation strategies. Team Presentation 1 is worth 10% of the final course grade.

Reading Response Paper

Each student will write a brief (600-700 words) response to a prompt provided by the course instructor, based on course readings. The reading response paper is worth 10% of the total course grade and is due at the end of week five.

Team Presentation at Sea

For the second presentation students will work in teams of two or three to develop and present a brief (12-15 minutes) talk aboard the ship. They will synthesize knowledge learned in the science-based *Oceans and Global Change* course with humanities-based approaches learned in this course and identify connections between scientific climate and oceanographic data and sociocultural and economic issues (e.g., ocean acidification and shellfishery production). The objective of the assignment is to identify concepts, language and methodologies that provide a space for interdisciplinary communication and collaborative research. Students will be graded as a team for organization and presentation, and for a two-page summary submitted to the course instructor. The instructor will provide a list of topics and will guide student teams in the development of their presentations. Team Presentation 2 is worth 10% of the final course grade.

Journal Entries and Presentation

During the second shore component and at sea, students will keep a journal of their observations and reflections based on course content, field trips, and experiences. Each journal entry will consist of a title, 2-3 pages of text, and a summary describing their observations and reflections through a program-based perspective. Students will be expected to identify specific readings, discussions and other course materials that inform their writing. For each of the five

total entries, the course instructor will provide a writing prompt. Students will receive feedback on their first journal entries through a peer review process and input from the instructor.

In a class meeting at the end of the sea component, students will draw from their favorite journal entries to perform for the group. Performances may include reading, art displays, music, or other modes of creative expression that demonstrate the connections between climate change and human lives. Students will submit a one-page summary or script of their presentation. The instructor will read and grade the completed journal. The journal and presentation are worth 20% and 10% of the total course grade, respectively.

Expectations and Requirements:

- Punctual attendance is required at every class meeting.
- Active participation in class discussion is expected.
- Late assignment submissions are not accepted.
- The policy on academic accuracy, quoted below, will be strictly followed in this class.

  The papers that you submit in this course are expected to be ***your original work.*** You must take care to distinguish your own ideas and knowledge from wording or substantive information that you derive from one of your sources. The term "sources" includes not only published primary and secondary material, but also information and opinions gained directly from other people and text that you cut and paste from any site on the Internet.

  The responsibility for learning the proper forms of citation lies with you. Quotations must be placed properly within quotation marks and must be cited fully. In addition, all paraphrased material must be acknowledged completely. Whenever ideas or facts are derived from your reading and research, the sources must be indicated. (Harvard *Handbook for Students,* 305)
- Considerations for use of internet sources:

  As you browse websites, assess their usefulness very critically. Who posted the information and why? Can you trust them to be correct? Authoritative? Unbiased? Your annotation should include the name of the author or organization originating any material that you reference. If you can't identify the source, don't use it!
- *Please consult information in the SEA Student Handbook on Academic Integrity and direct any questions to SEA Semester faculty.*

Required Readings:

Adger, W. Neil, Jon Barnett, Katrina Brown, Nadine Marshall, and Karen O'Brien. Cultural dimensions of climate change impacts and adaptation. *Nature Climate Change* 3:112-17. 2013.

Bacigalupi, Paolo. Shooting the Apocalypse. In: *Loosed Upon the World: The Saga Anthology of Climate Fiction*. John Joseph Adams, ed. pp. 1-24. New York: Saga Press. 2015.

Brugnach, M., M. Craps, and A Dewulf. Including indigenous peoples in climate change mitigation: addressing issues of scale, knowledge and power. *Climatic Change* 140:19-32. 2017.

Buck, Holly Jean. On the Possibilities of a Charming Anthropocene. *Annals of the Association of American Geographers* 105(2):369-377. 2015.

Cresswell, T. Place. *International Encyclopedia of Human Geography.* N. Thrift & R. Kitchen, eds. Oxford: Elsevier 8:169-177. 2009.

Dalby, Simon. The geopolitics of climate change. *Political Geography* 37:38-47. 2013.

Donges, Jonathan F., Wolfgang Lucht, Finn Müller-Hansen, and Will Steffen. The technosphere in Earth System analysis: A coevolutionary perspective. *The Anthropocene Review* 4(1):23-33. 2017.

Ellis, Erle. Involve social scientists in defining the Anthropocene. *Nature* 540:192-3. 8 December 2016.

Erlandson, Jon M., and Todd J. Braje. Archaeology and the Anthropocene. *Anthropocene* 4:1-7. 2013.

Gillard, Ross, Andrew Gouldson, Jouni Paavola, and James Van Alstine. Transformational responses to climate change: beyond a systems perspective of social change in mitigation and adaptation. *WIREs Climate Change* 7:251–265. 2016.

Haff, P.K. Being human in the Anthropocene. *The Anthropocene Review* 4(2):103-109. 2017.

Haff, Peter. Humans and technology in the Anthropocene: Six rules. *The Anthropocene Review* 1(2):126-136. 2014.

Hulme, Mike. Meet the humanities. *Nature Climate Change* 1:177-9. 2011.

Kaijser, Anna, and Annica Kronsell. Climate change through the lens of intersectionality. *Environmental Politics* 23(3):417-433. 2014.

Runciman, David. Optimism, Pessimism, and Fatalism. In *Nature, Action, and the Future: Political Thought and the Environment*. Katrina Forrester and Sophie Smith, eds. Pp. 202-220. Cambridge, UK: Cambridge University Press. 2018.

Sayre, Nathan F. The Politics of the Anthropogenic. *Annu. Rev. Anthropol*. 41:57-70. 2012.

Schmidt, Jeremy J., Peter G. Brown, and Christopher Orr. Ethics in the Anthropocene: A research agenda. *The Anthropocene Review* 3(3):188-200. 2016.

Smith, Bruce D., and Melinda A. Zeder. The onset of the Anthropocene. *Anthropocene* 4:8-13. 2013.

Sovacool, Benjamin K., Björn-Ola Linnér and Michael E. Goodsite. The political economy of climate adaptation. *Nature Climate Change* 5:616-618. 2015.

Toivanen, T., K. Lummaa, A. Majava, P. Järvensivu, V. Lähde, T. Vaden, and J.T. Eronen. The many Anthropocenes: A transdisciplinary challenge for Anthropocene research. *The Anthropocene Review* 4(3):183–198. 2017.

Wells, Jennifer, and Carolyn Merchant. Melting Ice: Climate Change and the Humanities. *Confluence* 14(2):13-27. 2009.

Yusoff, Kathryn, and Jennifer Gabrys. Climate Change and the Imagination. WIRE's *Climate Change* DOI: 10.1002/wcc.117. 2011.

Additional Readings:

There will be additional region- and site-specific readings based on program destination.

Course Calendar:

Topic	Readings/Assignments Due
Week 1 (4 hours) – on shore at SEA campus in Woods Hole	
First shore component ***Lecture:*** Introduction to the themes, readings, and expectations for the course ***Lecture:*** Climate change and human societies: an introduction	**Readings:** Hulme 2011; Haff 2017; Wells & Merchant 2009; Ellis 2016

Project Development Meetings	
Week 2 (5 hours) – on shore at SEA campus in Woods Hole	
Lecture: Archaeological and historical perspectives on the Anthropocene ***Lecture:*** Indigenous peoples and the roots of resilience ***Topic discussion:*** Defining resilience and adaptation	**Readings:** Erlandson & Braje 2013; Smith & Zeder 2013; Adger et al 2013; Brugnach et al 2017. **Due:** Annotated Bibliography
Week 3 (6 hours) – on shore at SEA campus in Woods Hole	
Lecture: Geopolitics and the technosphere ***Team Presentations 1*** ***Topic discussion:*** Assessing global solutions	**Readings:** Dalby 2013; Haff 2014; Donges et al 2017 **Due:** Team presentation 1 summary
Week 4 (6 hours) – on shore at SEA campus in Woods Hole	
Lecture: Climate change in literature, art and music ***Workshop:*** Articulating climate change in time and space ***Topic discussion*:** Ecotopias and dystopias	**Readings:** Yusoff & Gabrys 2011; Bacigalupi 2015; Buck 2015; Runciman 2018 **Due:** Literature Review
Week 5 (6 hours) – on shore at SEA campus in Woods Hole	
Lecture: Systems approaches to human-climate interactions ***Workshop:*** Interdisciplinary strategies ***Topic discussion:*** Working with the natural sciences	**Readings:** Toivanen et al 2017; Gillard et al 2016; Sayre 2012 **Due:** Reading response paper
Week 6 (7 hours) – on shore at SEA campus in Woods Hole	
Lecture: Climate, ethics and power ***Team project workshop*** ***Topic discussion:*** Novel problems and hidden voices	**Reading:** Schmidt et al 2016; Kaijser & Kronsell 2014; Sovacool et al 2015 **Due:** Interdisciplinary Solutions Paper

Week 7 (10 hours) – on shore in New Zealand	
Second shore component Lectures by course instructors at each of three field sites; Climate Change and Sense of Place workshop; Journal writing seminar and peer review session.	**Readings:** Cresswell 2009; site-specific readings to supplement second shore component lectures and guide Sense of Place workshop **Due:** Journal Entry 1

Week 8 (5 hours) – at sea	
Sea component ***Port Stop Field Trip*** ***Project Development Meetings***	**Readings:** Site-specific readings to guide at-sea reading discussions and port stop activities **Due:** Journal Entry 2
Week 9 (4 hours) – at sea	
Lecture: Climate change and conservation ***Project Development Meetings*** ***Small group discussions of readings***	**Readings:** Site-specific readings to supplement lecture and guide at-sea reading discussions **Due:** Journal Entry 3
Week 10 (6 hours) – at sea	
Lecture: Maritime literature in the Anthropocene 1 ***Project Development Meetings*** ***Workshop:*** Team presentations ***Small group discussions of readings***	**Readings:** Site-specific readings to supplement lecture and guide at-sea reading discussions **Due:** Journal Entry 4
Week 11 (8 hours) – at sea	
Lecture: Maritime literature in the Anthropocene 2 ***Port Stop Field Trip*** ***Team Presentations 2***	**Readings:** Site-specific readings to supplement lecture and guide at-sea reading discussions **Due:** Journal Entry 5; Team Presentation 2 and Summary

Small group discussions of readings	
Week 12 (8 hours) – at sea	
Lecture: Course review ***Journal Presentations***	**Due:** Journal Presentation and Summary