

HGO 4301: The Social Dimensions of Climate Change

(formerly SOSGEO4301 Global Environmental Change)

This course focuses on the social dimensions of climate change, emphasizing different approaches to understanding and addressing what climate change means for individuals, communities, ecosystems, species and humanity. The lectures and readings highlight social scientific approaches to climate change, particularly how different framings of the problem influence the types of solutions that are pursued or ignored. Students will be introduced to and reflect upon key concepts such as vulnerability, adaptation and resilience. The contribution of geographers to social understandings of climate change will be emphasized in the seminars, where each student will present the work of one geographer within the context of the course curriculum. There will be a written exam that focuses on understandings of theories, approaches, and concepts (40% of grade) as well as a course paper that focuses on theoretical, political, and practical aspects of climate change adaptation (60% of grade).

Learning outcome

Knowledge

- Explain and provide examples of different theories and approaches to understanding climate change;
- Recognize the implications of climate change for society, and the different ways of understanding and explaining causality.
- Understand how the social sciences can contribute to a broader and deeper understanding of climate change and adaptation.
- Awareness of key contributions of geographers to climate change research.
- Identify both the need for and challenges to climate change adaptation.
- Communicate how the framing of climate change can influence the solutions that are prioritized or ignored.

Skills

- Critically read and discuss academic articles on climate change, recognizing the importance of different discourses and approaches;
- Link theory and practice through an in-depth paper on climate change adaptation;
- Develop skills for oral and written communication of knowledge and competencies.

Competences

- Ability to explain linkages between social and environmental problems.
- Capacity to understand the social dimensions of climate change from multiple perspectives.
- Improved capacity for self-reflection and self-awareness.
- Critical engagement with climate change research and its implications for policy and practice.

Teaching

- The teaching will consist of lectures and seminars.
- Participation in 75% of the seminars is mandatory, which includes submission and presentation of a short paper on approaches and contributions of human geographers to climate change research.
- Approved compulsory attendance is valid as long as the course is offered.

Course Outline:

- 1. Course Introduction: Climate Change and Society**
(Maslin 2014) (Nielsen 2016) (K. O'Brien 2011)
- 2. Climate change: The problem of the century?**
(Butzer and Endfield 2012) (Swyngedouw 2010) (Rickards et al. 2014) (Hamilton 2010)
- 3. Understanding the uneven drivers and impacts of climate change**
(Pelling, Manuel-Navarrete, and Redcliff 2011) (Rosa and Dietz 2012) (Antonio and Clark 2015) (Redcliff and Sage 1998)
- 4. Cultural and ethical perspectives on climate change**
(Adger et al. 2013) (Norgaard 2006) (K. L. O'Brien and Wolf 2010) (St.Clair 2014)
- 5. Climate change, conflict and migration**
(Liverman 2009) (Farbotko and Lazrus 2012) (Hamilton et al. 2016) (Ide 2017) (Black et al. 2011)
- 6. Vulnerability and adaptation research**
(Cameron 2009) (Smit and Wandel 2006) (Pelling 2011) (Ribot 2014)
- 7. Adaptation discourses, policies and practices**
(Dannevig and Hovelsrud 2015) (Berrang-Ford, Ford, and Paterson 2011) (Head 2010) (Kates, Travis, and Wilbanks 2012)
- 8. Adaptation and development**
(Bassett and Fogelman 2013) (Ireland 2012) (Eriksen et al. 2015) (Sherman et al. 2016)
- 9. Climate change as an adaptive challenge**
(Adger et al. 2009) (New 2011) (Barnett and O'Neill 2010) (K. O'Brien and Selboe 2015)
- 10. Are we Resilient to Climate Change?**
(Olsson et al. 2015) (Folke et al. 2010) (Barnett et al. 2016) (O'Brien 2012)

Written exam: 40% (Concepts, theories, practices)

Course Paper: 60% (Adaptation theory, policy or practice)

References (@ = online, * = compendium)

Book: Maslin, Mark. 2014. *Climate Change: A Very Short Introduction*. 3 edition. Oxford: Oxford University Press. (216 pages)

@Adger, W. Neil, Jon Barnett, Katrina Brown, Nadine Marshall, and Karen O'Brien. 2013. "Cultural Dimensions of Climate Change Impacts and Adaptation." *Nature Climate Change* 3 (2): 112–17. doi:10.1038/nclimate1666. (6 pages)

@Adger, W. Neil, Suraje Dessai, Marisa Goulden, Mike Hulme, Irene Lorenzoni, Donald R. Nelson, Lars Otto Naess, Johanna Wolf, and Anita Wreford. 2009. "Are There Social Limits to Adaptation to Climate Change?" *Climatic Change* 93 (3–4): 335–54. doi:10.1007/s10584-008-9520-z. (20 pages)

*Antonio, Robert J., and Brett Clark. 2015. "The Climate Change Divide in Social Theory." In *Climate Change and Society*, edited by Riley E. Dunlap and Robert J. Brulle, 333–68. Oxford University Press. <http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199356102.001.0001/acprof-9780199356102-chapter-11>. (36 pages)

@Barnett, Jon, and Saffron O'Neill. 2010. "Maladaptation." *Global Environmental Change* 20 (2): 211–13. doi:10.1016/j.gloenvcha.2009.11.004. (3 pages)

@Barnett, Jon et al. 2016. A Science of Loss. *Nature Climate Change* 6: 976–978. (3 pages)

@Bassett, Thomas J., and Charles Fogelman. 2013. "Déjà vu or Something New? The Adaptation Concept in the Climate Change Literature." *Geoforum* 48 (August): 42–53. doi:10.1016/j.geoforum.2013.04.010. (12 pages)

@Berrang-Ford, Lea, James D. Ford, and Jaclyn Paterson. 2011. "Are We Adapting to Climate Change?" *Global Environmental Change* 21 (1): 25–33. doi:10.1016/j.gloenvcha.2010.09.012. (9 pages)

@Black, Richard, W. Neil Adger, Nigel W. Arnell, Stefan Dercon, Andrew Geddes, and David Thomas. 2011. "The Effect of Environmental Change on Human Migration." *Global Environmental Change, Migration and Global Environmental Change – Review of Drivers of Migration*, 21, Supplement 1 (December): S3–11. doi:10.1016/j.gloenvcha.2011.10.001. (9 pages)

@Butzer, Karl W., and Georgina H. Endfield. 2012. "Critical Perspectives on Historical Collapse." *Proceedings of the National Academy of Sciences* 109 (10): 3628–31. doi:10.1073/pnas.1114772109. (4 pages)

@Cameron, Emilie. 2009. "Summer Stories: (Re)Ordering the Canadian Arctic." *Antipode* 41 (1): 216–19. doi:10.1111/j.1467-8330.2008.00667.x. (4 pages)

@Dannevig, Halvor, and Grete K. Hovelsrud. 2015. "Understanding the Need for Adaptation in a Natural Resource Dependent Community in Northern Norway: Issue Salience, Knowledge and Values." *Climatic Change* 135 (2): 261–75. doi:10.1007/s10584-015-1557-1. (15 pages)

*Eriksen, Siri, Tor Håkon Inderberg, Karen O'Brien, and Linda Sygna. 2015. "Introduction: Development as Usual Is Not Enough." In *Climate Change Adaptation and Development: Transforming Paradigms and Practices*, 1–18. Routledge. (18 pages)

@Farbotko, Carol, and Heather Lazrus. 2012. "The First Climate Refugees? Contesting Global Narratives of Climate Change in Tuvalu." *Global Environmental Change*, Adding Insult to Injury: Climate Change, Social Stratification, and the Inequities of Intervention, 22 (2): 382–90. doi:10.1016/j.gloenvcha.2011.11.014. (9 pages)

@Folke, Carl, Stephen Carpenter, Brian Walker, Marten Scheffer, Terry Chapin, and Johan Rockström. 2010. "Resilience Thinking: Integrating Resilience, Adaptability and Transformability." *Ecology and Society* 15 (4). doi:10.5751/ES-03610-150420. (9 pages)

*Hamilton, Clive. 2010. *Requiem for a Species*. London ; Washington, DC: Routledge. (Chapters 7 & 8: 190-226) (37 pages)

@Hamilton, Lawrence C., Kei Saito, Philip A. Loring, Richard B. Lammers, and Henry P. Huntington. 2016. "Climigration? Population and Climate Change in Arctic Alaska." *Population and Environment* 38 (2): 115–33. doi:10.1007/s11111-016-0259-6. (19 pages)

@Head, Lesley. 2010. "Cultural Ecology: Adaptation - Retrofitting a Concept?" *Progress in Human Geography* 34 (2): 234–42. doi:10.1177/0309132509338978. (9 pages)

@Ide, Tobias. 2017. "Research Methods for Exploring the Links between Climate Change and Conflict." *Wiley Interdisciplinary Reviews: Climate Change*, January . doi:10.1002/wcc.456. (14 pages)

@Ireland, Philip. 2012. "Climate Change Adaptation: Business-as-usual Aid and Development or an Emerging Discourse for Change?" *International Journal of Development Issues* 11 (2): 92–110. doi:10.1108/14468951211241100. (19 pages)

@Kates, Robert W., William R. Travis, and Thomas J. Wilbanks. 2012. "Transformational Adaptation When Incremental Adaptations to Climate Change Are Insufficient." *Proceedings of the National Academy of Sciences* 109 (19): 7156–61. doi:10.1073/pnas.111521109. (6 pages)

@Liverman, Diana. 2009. "The Geopolitics of Climate Change: Avoiding Determinism, Fostering Sustainable Development: An Editorial Comment." *Climatic Change* 96 (1–2): 7–11. doi:10.1007/s10584-009-9638-7. (5 pages)

@Lövbrand, Eva, Silke Beck, Jason Chilvers, Tim Forsyth, Johan Hedrén, Mike Hulme, Rolf Lidskog, and Eleftheria Vasileiadou. 2015. "Who Speaks for the Future of Earth? How Critical Social Science Can Extend the Conversation on the Anthropocene." *Global Environmental Change* 32 (May): 211–18. doi:10.1016/j.gloenvcha.2015.03.012. (8 pages)

@New, Mark. 2011. "Four Degrees and beyond: The Potential for a Global Temperature Increase of Four Degrees and Its Implications." *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences* 369 (1934): 4–5. doi:10.1098/rsta.2010.0304. (2 pages)

@Nielsen, Jonas Østergaard, and Frank Sejersen. 2012. "Earth System Science, the IPCC and the Problem of Downward Causation in Human Geographies of Global Climate Change." *Geografisk*

Tidsskrift-Danish Journal of Geography 112 (2): 194–202. doi:10.1080/00167223.2012.741885. (9 pages)

@Norgaard, K. M. 2006. “‘We Don’t Really Want to Know’: Environmental Justice and Socially Organized Denial of Global Warming in Norway.” *Organization & Environment* 19 (3): 347–70. doi:10.1177/1086026606292571. (24 pages)

@O’Brien, Karen. 2011. “Responding to Environmental Change: A New Age for Human Geography?” *Progress in Human Geography* 35 (4): 542–49. doi:10.1177/0309132510377573.

@O’Brien, Karen. 2012. “Global Environmental Change II: From Adaptation to Deliberate Transformation.” *Progress in Human Geography* 36 (5): 667–76. doi:10.1177/0309132511425767. (10 pages)

@O’Brien, Karen L., and Johanna Wolf. 2010. “A Values-Based Approach to Vulnerability and Adaptation to Climate Change.” *Wiley Interdisciplinary Reviews: Climate Change* 1 (2): 232–42. doi:10.1002/wcc.30. (11 pages)

@ O’Brien, Karen, Siri Eriksen, Lynn P. Nygaard and Ane Schjolden. 2007. “Why Different Interpretations of Vulnerability Matter in Climate Change Discourses.” *Climate Policy* 7 (1): 73–88. doi:10.1080/14693062.2007.9685639. (16 pages)

*O’Brien, Karen, and Elin Selboe. 2015. “Climate Change as an Adaptive Challenge.” In *The Adaptive Challenge of Climate Change*, p.1-23. New York: Cambridge University Press. (23 pages)

@Olsson, Lennart, Anne Jerneck, Henrik Thoren, Johannes Persson, and David O’Byrne. 2015. “Why Resilience Is Unappealing to Social Science: Theoretical and Empirical Investigations of the Scientific Use of Resilience.” *Science Advances* 1 (4): e1400217. doi:10.1126/sciadv.1400217. (12 pages)

*Pelling, Mark. 2011. *Adaptation to Climate Change: From Resilience to Transformation*. London ; New York: Routledge. (Chapters 1 and 2: The Adaptation Age, Understanding Adaptation) (48 pages)

@Pelling, Mark, David Manuel-Navarrete, and M. R. Redclift, eds. 2011. *Climate Change and the Crisis of Capitalism*. New York: Routledge.

@Redclift, Michael, and Colin Sage. 1998. “Global Environmental Change and Global Inequality: North/South Perspectives.” *International Sociology* 13 (4): 499–516. doi:10.1177/026858098013004005. (18 pages)

@Ribot, Jesse. 2014. “Cause and Response: Vulnerability and Climate in the Anthropocene.” *The Journal of Peasant Studies* 41 (5): 667–705. doi:10.1080/03066150.2014.894911. (39 pages)

@Rickards, Lauren, Ray Ison, Hartmut Fünfgeld, and John Wiseman. 2014. “Opening and Closing the Future: Climate Change, Adaptation, and Scenario Planning.” *Environment and Planning C: Government and Policy* 32 (4): 587–602. doi:10.1068/c3204ed. (16 pages)

@Rosa, Eugene A., and Thomas Dietz. 2012. “Human Drivers of National Greenhouse-Gas Emissions.” *Nature Climate Change* 2 (8): 581–86. doi:10.1038/nclimate1506. (6 pages)

@ Sherman, Mya, Lea Berrang-Ford, Shuaib Lwasa, James Ford, Didacus B. Namanya, Alejandro

Llanos-Cuentas, Michelle Maillet, Sherilee Harper, and IHACC Research Team. 2016. "Drawing the Line between Adaptation and Development: A Systematic Literature Review of Planned Adaptation in Developing Countries." *Wiley Interdisciplinary Reviews: Climate Change* 7 (5): 707–26. doi:10.1002/wcc.416. (20 pages)

@Smit, Barry, and Johanna Wandel. 2006. "Adaptation, Adaptive Capacity and Vulnerability." *Global Environmental Change*, 16 (3): 282–92. doi:10.1016/j.gloenvcha.2006.03.008. (11 pages)

@ St.Clair, Asuncion Lera. 2014. "The Four Tasks of Development Ethics at Times of a Changing Climate." *Journal of Global Ethics* 10 (3): 283–91. doi:10.1080/17449626.2014.974111. (9 pages)

@Swyngedouw, Erik. 2010. "Apocalypse Forever? Post-Political Populism and the Spectre of Climate Change." *Theory, Culture & Society* 27 (2–3): 213–32. doi:10.1177/0263276409358728. (20 pages)

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