

HGO4302 – Transformations to Sustainability

How do we transform ourselves and our societies at the rate and scale called for by both science and policy? How do we do this in an equitable and just manner? This course explores theories, policies, and practices associated with transformations to sustainability. It provides students with an in-depth overview of concepts, theories and approaches for understanding the relationship between individual change, collective change, and systems change. The course contextualizes research on transformation within the Anthropocene, an epoch where global environmental changes are challenging models of socio-economic organization and the mental models and worldviews associated with them. Readings and lectures will consider the drivers and dynamics of transformative change from multiple perspectives and paradigms, including those that embrace alternative ways of thinking about humanity's relationship with the environment. Seminars will focus on the transformation in practice, including how we individually and collectively work with and scale transformative change.

Readings: 746 pages total

Lecture 1: Welcome to the Anthropocene (84 pages)

~~(Bentz et al. 2022) – (17 pages)~~

(Lynch and Veland 2018) – Chapter 1: Whose Anthropocene? (pages 1-32) – 32 pages

(Lövbrand et al. 2015) – (8 pages)

~~(Miller and Wyborn 2018) – (8 pages)~~

(K. O'Brien 2019) – (19 pages)

~~(Steffen et al. 2018) – (8 pages)~~

~~(Tabara et al. 2019) – (12 pages)~~

Lecture 2: Social Tipping Points (45 pages)

(Bentley et al. 2014) – (7 pages)

(Centola et al. 2018) – (4 pages)

(Lenton 2020) – (9 pages)

(Milkoreit et al. 2018) – (13 pages)

(Otto, Donges, et al. 2020) - (12 pages)

(Westley et al. 2011) – (19 pages)

Lecture 3: Concepts and Theories of Transformative Change - (62 pages)

(Adloff and Neckel 2019) – (11 pages)

(Feola 2015) – (14 pages)

(Meadows 1999) – (12 pages)

(Moore et al. 2014) – (10 pages)

(Sharpe et al. 2016) – (15 pages)

Recommended: (Sovacool and Hess, 2017) - (48 pages)

~~(Waddock and Kuenkel 2019) – (17 pages)~~

Lecture 4: The Politics of Transformation (90 pages)

~~(Beckman 2008) – (15 pages)~~

(Bennett et al. 2019) – (18 papers)

(Blythe et al. 2018) – (18 pages)

(Schlosberg 2004) – (24 pages)

(Scoones and Stirling 2020) – (30 pages)

Lecture 5: Critical Approaches to Transformation (90 pages)

(Brand 2016) – (23 pages)

(Feola 2019) – (10 pages)

(Massarella et al. 2021 – (9 pages)

(Schmid and Smith 2020) – (23 pages)

(Wright 2013) – (25 pages)

Lecture 6: Transforming the Commons – (97 pages)

(Pereira et al. 2020) – (18 pages)

(Nightingale 2019) – (20 pages)

(Nikolaeva et al. 2019) – (15 pages)

(Radywyl and Biggs 2013) – (12 pages)

(Nieto-Romero et al. 2019) – (11 pages)

(Barkin and Sánchez 2019) – (21 pages)

Lecture 7: Governing Transformations (80 pages)

(Biermann 2018) – (13 pages)

(Hölscher, Frantzeskaki, and Loorbach 2019) – (15 pages)

(Kuenkel 2019) – (Chapter 3: Global Transformation as a Collective Leadership Challenge - 16 pages)

(Patterson et al. 2016) – (16 pages)

~~(Waddell 2016) – (28 pages)~~

(Ziervogel, Cowen, and Ziniades 2016) – (20 pages)

Lecture 8: Deep Transformations: Linking Capacities and Human Agency (81 pages)

(Berzonsky and Moser 2017) – (9 pages)

(Charli Joseph et al. 2018) – (15 pages)

(Hedlund-de Witt 2011) – (19 pages) – (was recommended reading last year)

(Ives et al 2020 -- (10 pages)

(Otto, Wiedermann, et al. 2020) – (9 pages)

(Schlitz, Vieten, and Miller 2010) – (19 pages)

~~(Wamsler 2018) – (15 pages)~~

Lecture 9: Deeper Transformations: What is real? (81 pages)

(Alaimo 2012) - (7 pages)

(Geels 2010) – (16 pages)

(Joronen and Häkli 2017) – (19 pages)

(Müller 2015) – (15 pages)

(K. L. O'Brien 2016) – (9 pages)

~~(Shotter 2014) – (21 pages)~~

(Walsh et al. 2020) – (15 pages)

Lecture 10: The Art of Transformation – (66 pages)

(Hawkins et al. 2015) – (12 pages)

(Galafassi et al. 2018) – (9 pages)

(Moore and Milkoreit 2020) (17 pages)

(Tyszczyk and Smith 2018) – (9 pages)

(Whyte 2018) – (19 pages)

~~(Henderson and Wamsler 2020) – (15 pages)~~

Complete reading list H22:

- Adloff, Frank, and Sighard Neckel. 2019. "Futures of Sustainability as Modernization, Transformation, and Control: A Conceptual Framework." *Sustainability Science* 14 (4): 1015–25. <https://doi.org/10.1007/s11625-019-00671-2>.
- Alaimo, Stacy. 2012. "Sustainable This, Sustainable That: New Materialisms, Posthumanism, and Unknown Futures." *PMLA* 127 (3): 558–564.
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- Beckman, Ludvig. 2008. "Do Global Climate Change and the Interest of Future Generations Have Implications for Democracy?" *Environmental Politics* 17 (4): 610–24. <https://doi.org/10.1080/09644010802193500>.
- Bennett, Nathan J., Jessica Blythe, Andrés M. Cisneros-Montemayor, Gerald G. Singh, and U. Rashid Sumaila. 2019. "Just Transformations to Sustainability." *Sustainability* 11 (14): 3881. <https://doi.org/10.3390/su11143881>.
- Bentley, R. A., Eleanor J. Maddison, P. H. Ranner, John Bissell, Camila C. S. Caiado, Pojanath Bhatanacharoen, Timothy Clark, et al. 2014. "Social Tipping Points and Earth Systems Dynamics." *Frontiers in Environmental Science* 2. <https://doi.org/10.3389/fenvs.2014.00035>.
- Bentz, J., O'Brien, K. & Scoville-Simonds, M. 2022. Beyond "blah blah blah": exploring the "how" of transformation. *Sustain Sci* 17, 497–506.
- Berzonsky, Carol L., and Susanne C. Moser. 2017. "Becoming Homo Sapiens Sapiens: Mapping the Psycho-Cultural Transformation in the Anthropocene." *Anthropocene*, Challenges of the "Anthropocene," 20 (December): 15–23. <https://doi.org/10.1016/j.ancene.2017.11.002>.
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- Blythe, Jessica, Jennifer Silver, Louisa Evans, Derek Armitage, Nathan J. Bennett, Michele-Lee Moore, Tiffany H. Morrison, and Katrina Brown. 2018. "The Dark Side of Transformation: Latent Risks in Contemporary Sustainability Discourse." *Antipode*. <https://doi.org/10.1111/anti.12405>.
- Brand, Ulrich. 2016. "How to Get Out of the Multiple Crisis? Contours of a Critical Theory of Social-Ecological Transformation." *Environmental Values* 25 (5): 503–25. <https://doi.org/10.3197/096327116X14703858759017>.
- Centola, Damon, Joshua Becker, Devon Brackbill, and Andrea Baronchelli. 2018. "Experimental Evidence for Tipping Points in Social Convention." *Science* 360 (6393): 1116–19. <https://doi.org/10.1126/science.aas8827>.
- Charli-Joseph, Lakshmi, J. Mario Siqueiros-Garcia, Hallie Eakin, David Manuel-Navarrete 3 and Rebecca Shelton. 2018. Promoting agency for social-ecological transformation: a transformation-lab in the Xochimilco social-ecological system. *Ecology and Society*: 23(2):46.
- Feola, Giuseppe. 2015. "Societal Transformation in Response to Global Environmental Change: A Review of Emerging Concepts." *Ambio* 44 (5): 376–90. <https://doi.org/10.1007/s13280-014-0582-z>.
- . 2019. "Capitalism in Sustainability Transitions Research: Time for a Critical Turn?" *Environmental Innovation and Societal Transitions*, February, S2210422418301576. <https://doi.org/10.1016/j.eist.2019.02.005>.
- Galafassi, Diego, Sacha Kagan, Manjana Milkoreit, María Heras, Chantal Bilodeau, Sadhbh Juarez Bourke, Andrew Merrie, Leonie Guerrero, Guðrún Pétursdóttir, and Joan David Tàbara. 2018.

- “Raising the Temperature’: The Arts on a Warming Planet.” *Current Opinion in Environmental Sustainability* 31 (April): 71–79. <https://doi.org/10.1016/j.cosust.2017.12.010>.
- Geels, Frank W. 2010. “Ontologies, Socio-Technical Transitions (to Sustainability), and the Multi-Level Perspective.” *Research Policy*, Special Section on Innovation and Sustainability Transitions, 39 (4): 495–510. <https://doi.org/10.1016/j.respol.2010.01.022>.
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- Hendersson, Heidi, and Christine Wamsler. 2020. “New Stories for a More Conscious, Sustainable Society: Claiming Authorship of the Climate Story.” *Climatic Change* 158 (3): 345–59. <https://doi.org/10.1007/s10584-019-02599-z>.
- Hölscher, Katharina, Niki Frantzeskaki, and Derk Loorbach. 2019. “Steering Transformations under Climate Change: Capacities for Transformative Climate Governance and the Case of Rotterdam, the Netherlands.” *Regional Environmental Change* 19 (3): 791–805. <https://doi.org/10.1007/s10113-018-1329-3>.
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- Lynch, Amanda H., and Siri Veland. 2018. Whose Anthropocene? Chapter 1 of *Urgency in the Anthropocene*. Cambridge, MA: MIT Press. (Available online)
- Massarella et al. 2021. Transformation beyond conservation: how critical social science can contribute to a radical new agenda in biodiversity conservation. *COSUST*. 49:79–87.
- Meadows, Donella H. 1999. “Leverage Points: Places to Intervene in a System.” The Sustainability Institute. <http://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>.
- Milkoreit, Manjana, Jennifer Hodbod, Jacopo Baggio, Karina Benessaiah, Rafael Calderón-Contreras, Jonathan F Donges, Jean-Denis Mathias, Juan Carlos Rocha, Michael Schoon, and Saskia E Werners. 2018. “Defining Tipping Points for Social-Ecological Systems Scholarship—an Interdisciplinary Literature Review.” *Environmental Research Letters* 13 (3): 033005. <https://doi.org/10.1088/1748-9326/aaaa75>.
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- O'Brien, Karen. 2019. "Taking Climate Change and Transformations to Sustainability Seriously." In *What Next for Sustainable Development? Our Common Future at Thirty*, edited by James Meadowcroft, D. Banister, E. Holden, O. Langhelle, K. Linnerud, and G. Gilpin, 200–218. Cheltenham: Edward Elgar.
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- Pereira, Laura, Niki Frantzeskaki, Aniek Hebinck, Lakshmi Charli-Joseph, Scott Drimie, Michelle Dyer, Hallie Eakin, et al. 2020. "Transformative Spaces in the Making: Key Lessons from Nine Cases in the Global South." *Sustainability Science* 15 (1): 161–78. <https://doi.org/10.1007/s11625-019-00749-x>.
- Radywyl, Natalia, and Che Biggs. 2013. "Reclaiming the Commons for Urban Transformation." *Journal of Cleaner Production*, Special Issue: Advancing sustainable urban transformation, 50 (July): 159–70. <https://doi.org/10.1016/j.jclepro.2012.12.020>.
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