GEOG 606: NATURE, TECHNOSCIENCE, JUSTICE

Spring 2021, Thursdays 8:40AM-11:40AM
Teaching mode: Virtual (Zoom through Canvas)

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Schedule OH:	https://marston-office-hours.youcanbook.me
LMS (Canvas):	https://rutgers.instructure.com/courses/112519

The aim of this course is to imagine the contents and limits of a politically engaged "technoscientific geography." Broadly speaking, critical human geographers and science studies scholars have not been in substantive conversation with one another, despite sharing many of the same empirical interests. Most notably, both disciplinary traditions share a set of concerns with the politics of nature and questions of environmental justice. Using these themes as an anchor, this course explores scholarship located along the cutting edge of disciplines that range from geography and anthropology to ethnic studies, media studies, and science and technology studies (STS).

Part 1 of the course explores how the topics of science and technology are handled within a variety of theoretical traditions, including but not limited to political economy, poststructuralism, and foundational STS texts. In Part 2, we will read recent STS monographs that deal directly environmental justice concerns such as waste, toxicity, infrastructure. This course is reading intensive, so you can expect to read the equivalent of a book and a couple of articles every week. Recognizing that not everyone comes to graduate school with the same kind of preparation, please feel welcome to visit me in office hours at any point in the semester if you wish to discuss the readings further. Intellectuals are just people who have had more opportunities to read and discuss scholarly work, and this should be a supportive environment for practicing those skills.

Representative Texts (*no guarantee about any of these books, but this is the kind of work we'll be reading!)*

Part I: Foundations (in order of publication date)

- Marx, K. (1990[1867]). "Machinery and Modern Industry" Chapter 15 of *Capital, Volume 1*. London: Penguin Classics.
- Foucault, M. (2005[1970]). *The Order of Things*. New York: Routledge.
- Shapin, S., & Schaffer, S. (1985). *Leviathan and the air-pump: Hobbes, Boyle, and the experimental life*. Princeton University Press.
- Winner, L. (1986) "Technologies as Forms of Life," "Do Artifacts Have Politics," and "Techne and Politeia" in *The Whale and the Reactor*. Chicago: U Chicago Press
- Noble, D. (1987). *Forces of production: a social history of industrial automation*. New York: Oxford University Press.
- Adas, M. (1989). *Machines as the measure of men: science, technology, and ideologies of western dominance*. Ithaca, NY: Cornell University Press.

- Merchant, C. (1989). *The death of nature: women, ecology, and the scientific revolution*. San Francisco: Harper & Row.
- Haraway, D. J. (1989). *Primate visions: Gender, race, and nature in the world of modern science*. Psychology Press.
- Latour, B. (1991). *We have never been modern*. Cambridge: Harvard University Press.
- Mitchell, T. (2002). *Rule of experts: Egypt, techno-politics, modernity*. Berkeley/LA: University of California Press
- Jasanoff, S. (2004) *States of Knowledge: The Co-Production of Science and Social Order*. New York: Routledge.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press.
- Daston, L., & P. Galison.(2007). *Objectivity*. Cambridge: Zone Books. pp. 9-53, 371.
- Harding, S. (2008). *Sciences from below: Feminisms, postcolonialities, and modernities*. Duke University Press.

Part 2: Contemporary Monographs (examples)

- Wylie, S. (2018) *Fractivism: Corporate Bodies and Chemical Bonds.* Durham: Duke University Press.
- Toussignant, N. (2018). Edges of Exposure: Toxicology and the Problem of Capacity in Postcolonial Senegal. Durham: Duke.
- Guthman, J. (2019). *Wilted: Pathogens, Chemicals, and the Fragile Future of the Strawberry Industry*. Berkeley: University of California Press.
- Tsing, A. L. (2015). *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton University Press.
- Lave, R. (2012). *Fields and streams: Stream restoration, neoliberalism, and the future of environmental science*. University of Georgia Press.
- Parreñas, J. S. (2018). *Decolonizing extinction: The work of care in orangutan rehabilitation*. Durham: Duke University Press.
- Rose, D. B. (2011). *Wild dog dreaming: Love and extinction*. University of Virginia Press.
- Masco, J. (2006]). *The Nuclear Borderlands: The Manhattan Project in Post–Cold War New Mexico.* Princeton University Press.
- Hecht, G. (2014). *Being nuclear: Africans and the global uranium trade*. Cambridge: MIT Press.
- Liboiron, M. (2021). *Pollution is Colonialism.* Durham: Duke University Press.
- Voyles, T. B. (2015). *Wastelanding: Legacies of uranium mining in Navajo country*. U of Minnesota Press.
- Hoover, E. (2017*). The River Is In Us: Fighting Toxics in a Mohawk Community.* Minneapolis: U of Minnesota Press.
- McKittrick, K. (2021). *Dear Science and Other Stories*. Durham: Duke University Press
- TallBear, K. (2013). *Native American DNA: tribal belonging and the false promise of genetic science*. Minneapolis: University of Minnesota Press.
- Murphy, M. (2006). *Sick building syndrome and the problem of uncertainty: Environmental politics, technoscience, and women workers*. Durham: Duke University Press