

FAK3154 The Rise of Global Environmental Governance, 1940s to 2020s
PhD Course, Third Cycle
VT2023
5 ECTS

Division of History of Science, Technology and Environment
KTH Royal Institute of Technology Stockholm

Course Aim

The aim of this course is to provide students with an overview and knowledge about established as well as recent research on the rise and development of global environmental governance since 1945. Students will be introduced to the concept of governance and to the history of environmental governance developed to address a range of seminal challenges relating to environment and climate on a global scale. Special attention will be given to the exploration and critical analysis of the international system of environmental organizations, networks, science and policy instruments in a (global) historical perspective. The exploration will draw on the history of science, technology and environment and on neighboring fields like the environmental humanities, legal history, economic history, STS and postcolonial studies.

The course is organized by the members of the ERC project SPHERE – Study of the Planetary Human Environment Relationship. General information about the SPHERE project, blogposts, and access to publications on: www.spheregovernance.org

Learning Outcomes

After having passed the course, the students will be able to:

- account for the concept of governance and its rise and development as a policy concept;
- review how governance has been introduced to address a range of seminal challenges relating to environment and climate;
- account for the emergence and growth of international institutions and other social and political organizations and networks active in GEG and the scientific and other forms of expertise behind the rise of GEG and pursuing it in practice;
- identify the various geophysical objects and elements on which GEG has been applied and evaluate the scientific, legal and economic tools and methods used in GEG, and how they have worked in real time situations;
- understand the role of scale and scaling mechanisms in multilevel settings from local to global/planetary levels and reflect on the different temporalities at play in GEG;
- discuss forms of agency of actors and organizations and the targeting and affecting of different local and global communities by GEG in a postcolonial and a global justice perspective;
- communicate research results orally and in writing and apply concepts and perspectives of environmental governance consciously in their own work.

Course Requirements

To pass the course, students will have to:

- actively participate in 6 classes of lectures and seminars (a missed class can be compensated with a written substitute assignment, upon agreement);
- prepare for class by reading the assigned primary and secondary literature;
- submit weekly written assignments (ca. 1 000 words) reflecting on the 5 subthemes of the course, to be submitted 3 days before class;

- actively participate in a group exercise, jointly preparing and presenting one out of 5 subthemes for class;
- pass a written examination in the form of an essay of ca. 4 000 words that addresses one of the course's subthemes of GEG, to be submitted 4 weeks after the final class event.

Eligibility

The course is offered to graduate students at KTH and other institutions of higher education. Eligible applicants are students who meet the requirements for admission to graduate/PhD studies in history or other humanities and social sciences.

Credits

5 ECTS

Grading Scale

P/F

Course Organization

The course is divided into six classes (lectures and seminars) under the spring term of 2023:

1 Global, Environmental, and Governance: Conceptual approaches to GEG
Thursday, 30 March, 9.00–12.00

2 Elements and Objects of Environmental Governance
Thursday, 6 April, 9.00–12.00

3 Science, Technology, and Governance
Thursday, 13 April, 9.00–12.00

4 Institutions and Agency
Thursday, 20 April, 9.00–12.00

5 Tools of GEG
Thursday, 27 April, 9.00–12.00

6 Political Ecology of GEG
Thursday, 11 May, 9.00–12.00

Classes will be held on site at KTH. Seminar Room, Division of History of Science, Technology and Environment, Teknikringen 74 D, 100 44 Stockholm. Zoom-in options will be provided upon agreement.

The course language is English.

For each of the classes a set of literature will be assigned that consists of state-of-the-art international scholarship, texts that provide an overview of recent developments in the field, and primary readings. Not all listed literature will be read intensively. Part will be required, part recommended readings. Each class will discuss at least one primary source text.

Teaching takes the form of a mix of lectures and seminars, with shorter introductions to the literature given both by teachers and students. Particular weight will be put on students' active discussion of the course material. Students will write and present short text reflections (ca. 1 000 words). Students will actively participate in group work to prepare one out of 5

subthemes of the course and jointly present their work in class. Students shall also write an individual course essay of ca. 4 000 words on a topic of choice related to the course.

Teachers

Sverker Sörlin
Sabine Höhler

Additional instructors:

Thomas Harbøll Schrøder
Jasmin Höglund Hellgren
Gloria Samosír
Erik Isberg
Susanna Lidström
Tirza Meyer
Eric Paglia
Paul Warde

Examiner

Nina Wormbs

Expression of Interest/Course Registration

For any questions and to register your interest in taking this course, please contact Sabine Höhler, sabine.hoehler@abe.kth.se

Preference will be given to students who can participate onsite.

Schedule with a Preliminary Reading List

1 Global, Environmental, and Governance: Conceptual approaches to GEG

Thursday, 30 March, 9.00–12.00

This introductory class explores the basic concepts involved and how they have shaped GEG: global, environment, and governance, and their combinations.

Literature:

Norman Myers, “Environmental Challenges: More Government or Better Governance?” *Ambio* 17(1988): 6, 411–414. <http://www.jstor.org/stable/4313514>.

Frank Biermann & Rakhyun E. Kim (ed.), *Architectures of Earth System Governance: Institutional Complexity and Structural Transformation* (Cambridge, UK: Cambridge University Press, 2020).

Bentley B. Allan, “Producing the Climate: States, Scientists, and the Constitution of Global Governance Objects”, *International Organization* 71(2017): 1, 131–162.
<https://doi.org/10.1017/S0020818316000321>

Eva Löwbrand, Johannes Stripple, & Bo Wiman, “Earth System Governmentality: Reflections on science in the Anthropocene”, *Global Environmental Change* 19(2009): 1, 7–13.
10.1016/j.gloenvcha.2008.10.002

Sverker Sörlin & Nina Wormbs, “Environing Technologies: A Theory of Making Environment,” *History & Technology* 34(2018):2, 101-125.

Joe Masco, “The Age of Fallout”, *History of the Present* 5(2015):2, 137-168.

P. Warde, L. Robin, & S. Sörlin, *The Environment – A History of the Idea* (Baltimore, MD & London: Johns Hopkins University Press, 2018), 244 pp.

Jenny Andersson & Sibylle Duhautois, “Futures of Mankind: The Emergence of the Global Future”, in Rens van Munster & Casper Sylvest, *The Politics of Globality Since 1945: Assembling the Planet* (Oxford: Routledge 2016), 106-125.

Sabine Höhler, *Spaceship Earth in the Environmental Age, 1960–1990* (London: Routledge, 2015).

Hamann, Ralph, Jana Hönke, & Tim O’Riordan, “Environmental and Natural Resources”, in Anke Draude, Tanja A. Börzel, & Thomas Risse (eds), *The Oxford Handbook of Governance and Limited Statehood* (2018; online edn, Oxford Academic, 5 Apr. 2018), <https://doi.org/10.1093/oxfordhb/9780198797203.013.24>, c. 20 pp.

2 Elements and Objects of Environmental Governance (SrS)

Thursday, 6 April, 9.00–12.00

This class addresses the elements that are the concern of GEG and sometimes emerged as governable objects as a result of it, such as the atmosphere, hydrosphere (oceans, waters), cryosphere (glaciers, sea ice), lithosphere (minerals, strata), as well as forests, soils, and ecosystems.

Literature:

Sarah Dry, *The Waters of the World: The Story of the Scientists Who Unraveled the Mysteries of Our Oceans, Atmosphere, and Ice Sheets and Made the Planet Whole* (Chicago, IL: University of Chicago Press, 2019). Excerpts.

Mike Hulme, “Reducing the future to climate: A Story of Climate Determinism and Reductionism”, *Osiris* 26(The University of Chicago Press, 2011), 245-66, reprinted in: *The Future of Nature: Documents of Global Change*, eds. L. Robin, S. Sörlin & P. Warde (New Haven, CT: Yale University Press, October 2013), 520-525.

Henrik Ernstson & Sverker Sörlin, “Ecosystem services as technology of globalization: On articulating values in urban nature”, *Ecological Economics* 86(2013), <https://doi.org/10.1016/j.ecolecon.2012.09.012>, 274-284.

Erik Isberg & Eric Paglia (2021), ”Rendering the Earth a governable object in the Anthropocene”, <https://podcasts.apple.com/se/podcast/rendering-earth-governable-object-in-anthropocene/id1539916264?i=1000518706908>

Other relevant podcasts on similar themes on:

<https://podcasts.apple.com/se/podcast/sphere-a-podcast-on-the-evolution-of/id1539916264>

3 Science, Technology, and Governance (SH)

Thursday, 13 April, 9.00–12.00

This class addresses the roles of science, knowledge and expertise in the rise and execution of GEG.

Literature:

Harry Collins & Robert Evans, *Rethinking Expertise* (Chicago, IL: University of Chicago Press, 2007), excerpts.

Jasmin Höglund Hellgren, “Negotiating governable objects: glaciers in Argentina”, in *Ice Humanities: Living, Thinking and Working in a Melting World*. Eds. Klaus Dodds & Sverker Sörlin (Manchester: Manchester University Press, 2022), <https://www.manchesterhive.com/view/9781526157782/9781526157782.00021.xml>, 228-249.

Anna Tunlid, “The Askö Laboratory: The Field Station as a Place for Fostering Scientific Collaboration and Development”, in *Understanding Field Science Institutions*, eds. Helena Ekerholm, Karl Grandin, Christer Nordlund & Patience A. Schell (Sagamore Beach, MA: Science History Publications, 2018), 315-342.

Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin, III, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C. A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley, “Planetary Boundaries: Exploring the safe operating space for humanity”. *Nature* 461 (24 September 2009), 472-475.

Julia Adeney Thomas & Zoltán Boldizsár Simon, “Earth System Science, Anthropocene Historiography, and Three Forms of Human Agency”, *Isis* 113(2022):2, 396-406. <https://www.journals.uchicago.edu/doi/pdf/10.1086/719647>

Will Steffen et al., “The Emergence and Evolution of Earth System Science,” *Nature Reviews Earth and Environment*, 2020, 1:54–63, <https://doi.org/10.1038/s43017-019-0005-6>.

Eric Paglia & Sverker Sörlin, “Planetary Boundaries and Big Tent Science”, and “2015 and Beyond: Safe Operating Space 2.0”, chs. 7 & 8 in: *The Human Environment: Stockholm and the Rise of Global Environmental Governance* (Cambridge University Press 2023). Ms. Extensive reading, c. 50 pp.

Perrin Selcer, *The Postwar Origins of the Global Environment: How the United Nations Built Spaceship Earth* (New York: Columbia University Press, 2018).

4 Institutions and Agency (SrS)

Thursday, 20 April, 9.00–12.00

This class explores the institutions that were created, shaped, or reformed in the rise and evolution of GEG, including NGOs and other non-state actors.

Literature:

Matthias Schmelzer (2012) “The crisis before the crisis: the ‘problems of modern society’ and the OECD, 1968–74”, *European Review of History: Revue européenne d'histoire*, 19:6, 999-1020. <https://doi.org/10.1080/13507486.2012.739148>

Susan Owens, *Knowledge, policy, and expertise: the UK Royal Commission on Environmental Pollution, 1970-2011* (Oxford: Oxford University Press, 2015), excerpts.

Tirza Meyer, *Elisabeth Mann Borgese and the Law of the Sea* (Leiden: Brill, 2022), <https://library.oapen.org/handle/20.500.12657/54654>, excerpts.

Bartow J. Elmore, “The Environmental History of an American Bank”, *Environmental History* 27(2022):1, 113-139. <https://doi.org/10.1086/717439>

Stephen J. Macekura, *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge: Cambridge University Press, 2015).

5 Tools of GEG (SH)

Thursday, 27 April, 9.00–12.00

This class discusses the tools, instruments, numbers, and concepts that enable and standardize the operations of GEG.

Literature:

Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, & William W. Behrens, III, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind* (London: Earth Island Limited, 1972).

Wouter van Dieren, ed., *Taking Nature into Account: A Report to the Club of Rome* (New York: Springer, 1995).

Robert Costanza, et al., “The Value of the World’s Ecosystem Services and Natural Capital”, *Nature* 387 (1997), 253–260.

Fernando Elichirigoity, *Planet Management: Limits to Growth, Computer Simulation, and the Emergence of Global Spaces* (Evanston, Ill.: Northwestern University Press, 1999).

Mart A. Stewart, “Swapping Air, Trading Places. Carbon Exchange, Climate Change Policy, and Naturalizing Markets”, *Radical History Review* 107(2010), 25–43.

Andrew F. Johnson, & Susanna Lidström, “The balance between concepts and complexity in ecology”, *Nature Ecology & Evolution*, 2(2018):4, 585-587.

Kent A. Redford & W. M. Adams, *Strange Natures: Conservation in the Era of Synthetic Biology* (New Haven, CT: Yale University Press, 2021). Excerpts.

[See also: Adam Wickberg, review of: *Strange Natures: Conservation in the Era of Synthetic Biology*. *Global Environmental Politics* 2021; 21 (4): 158–160. doi: https://doi.org/10.1162/glep_r_00638]

Adam Wickberg, & Johan Gärdebo, eds., *Environing Media* (New York/London: Routledge, 2022).

Jennifer Gabrys, *Program Earth: Environmental Sensing Technology and the Making of a Computational Planet* (Minneapolis: University of Minnesota Press, 2016).

6 Political Ecology of GEG (SH, SrS)

Thursday, 11 May, 9.00–12.00

The concluding class discusses the nodes, networks, people and politics of GEG and how they relate to each other.

Literature:

Jim Igoe & Dan Brockington, “Neoliberal Conservation: A Brief Introduction”, *Conservation & Society* 5(2007):4, 432-449.

Sven Widmalm, “The Place of Humanities in a World of Science: Nobel Symposium 14 and the Vanishing Humanist”, in; *The Humanities and the Modern Politics of Knowledge: The Impact and Organization of the Humanities in Sweden, 1850-2020*, edited by Anders Ekström & Hampus Östh Gustafsson, 179–204. Amsterdam University Press, 2022. <https://doi.org/10.2307/j.ctv2svjznh.10>. Open Access.

Eric Paglia, “The Swedish initiative and the 1972 Stockholm Conference: the decisive role of science diplomacy in the emergence of global environmental governance”, *Humanit Soc Sci Commun* 8(2021):2. <https://doi.org/10.1057/s41599-020-00681-x>. c. 20 pp.

Torsten Kahlert, “Pioneers in International Administration: A Prosopography of the Directors of the League of Nations Secretariat”, *New Global Studies* 13(2019):2, 190-227. <https://www.degruyter.com/document/doi/10.1515/ngs-2018-0039/html>