



Faculty of Arts and Social Sciences
Environmental Science

Course Reading

Sustainable development - with focus on Climate Change

Valid from 08/31/2020

Course Code: CCGA01

Course Title: Sustainable development - with focus on Climate Change

Credits: 15 ETCS cr

Degree Level: Undergraduate level

Books

Brown, Lester R (2009). *Plan B 4.0: Mobilizing to Save Civilization [ENG]: Plan B 4.0 Uppdrag: rädda civilisationen! [SV]*. W. W. Norton & Company www.earth-policy.org/images/uploads/book_files/pb4book.pdf Available in English and Swedish / Tillgänglig på engelska och svenska

Gullikson, Håkan och Holmgren, Ulf (2018). *Hållbar utveckling: teknik, samhälle och livskvalitet* (3 ed.). Studentlitteratur

Roorda, Niko (2017). *Fundamentals of Sustainable Development*. Routledge

Articles

Rockström, J., Steffen, W., Noone, K., Persson, A., Chapin, F.S., Lambin, E.F., Lenton, T.M., Scheffer, M., Folke, C., Schellnhuber, H.J. (2009a). A safe operating space for humanity. *Nature*, 461, p. 472-475

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F.S.I., Lambin, E., Lenton, T.M., Scheffer, M., Folke, C., Schellnhuber, H.J., Nykvist, B., de Wit, C.A., Hughes, T., Snyder, P.K., Costanza (2009b). Planetary Boundaries: Exploring the Safe Operating Space for Humanity. *Ecology and Society*, 35

Steffen, W., Richardson, K., Rockstrom, J., Cornell, S.E., Fetzer, I., Bennett, E.M., Biggs, R., Carpenter, S.R., de Vries, W., de Wit, C.A., Folke, C., Gerten, D., Heinke, J., Mace, G.M., Persson, L. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347. <https://doi.org/10.1126/science.1259855>

Misc.

IPBES (2019), Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science- Policy Platform on Biodiversity and Ecosystem Services. Summary for Policymakers. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES Secretariat, Bonn, Germany, Finns att ladda ned

IPCC (2014), Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policymakers. R.K. Pachauri and L.A. Meyer (eds.)], Finns att ladda ned

UN (2018), The sustainable development goals report 2018, Finns att ladda ned

Reference material

(2015). *Climate Change and Sustainable Development - Assessing Progress of Regions and Countries*. OUP, India, : The Energy and Resources Institute (TERI)

Bhowmik, A.K., McCaffrey, M., Frischmann, C., Gaffney, O., Ruskey, A. (2020). Powers of 10: A framework to optimise implementation of climate action strategies from individual to global scales. *Under review*. <https://doi.org/10.31223/osf.io/feaq5>

Black, R. (2011). The effect of environmental change on human migration. *Global Environmental Change*, 21S, p. 3-11

Elliot, Jennifer (2012). *An Introduction to Sustainable Development* (4 ed.). Routledge

Hawken, P. (ed) (2017). *Drawdown: the most comprehensive plan ever proposed to reverse global warming*. New York, New York: Penguin Books

Kriegler, E., Messner, D., Nakicenovic, N., Riahi, K., Rockström, J., Sachs, J., van der Leeuw, S., van Vuuren, D., Aguiar, A.P., Berg, L., Bhowmik, A.K., Biberman, J., Boza-Kiss, B., Breuer, A., Busc (2018). Transformations to Achieve the Sustainable Development Goals: TWI2050 - The World in 2050. *International Institute for Applied Systems Analysis (IIASA)*

Markkula, I., Turunen, M., and Rasmus, S. (2019). A review of climate change impacts on the ecosystem services in the Saami Homeland in Finland. *Science of The Total Environment*, 692, p. 1070-1085

Otto, I., Donges, J., Bhowmik, A.K., Cremades, R., Lucht, W., McCaffrey, M., Schellnhuber, H.J., Rockström, J. (2019). Social tipping dynamics for stabilizing Earth's climate by 2050. *Proceedings of the National Academy of Sciences*

Tillkommer även annan litteratur för bredvidläsning (mindre sidantal).

Approved by the Faculty Board of Arts and Social Sciences 01/07/2020