



Literature for MESS33, Sustainability Science applies from autumn semester 2020

Literature established by The Board of the Lund University Centre for
Sustainability Studies on 2020-06-11 to apply from 2020-08-26

See appendix.

Hållbarhetsvetenskap, 10 högskolepoäng
Sustainability Science, 10 credits

MESS33 litteraturlista fastställd av LUCSUS styrelse den 11 juni 2020 (Dnr STYR 2020/1049).

Burkhard B. & Müller F. *Encyclopedia of Ecology Ecological Indicators: Driver–Pressure–State–Impact–Response*. Elsevier. 2008. 2: 967-970. (4)

Cash, D. W., Clark, W. C., Alcock, F., Dickson, N., Eckley, N., Guston, D. H., Jäger, J. & Mitchell R. B. *Knowledge systems for sustainable development*. PNAS, 2003. 100(14): 8086-8091. (5)

Cash, D. W., W. Adger, F. Berkes, P. Garden, L. Lebel, P. Olsson, L. Pritchard, and O. Young. *Scale and cross-scale dynamics: governance and information in a multilevel world*. *Ecology and Society* 2006. 11(2): 8. [online] URL: <http://www.ecologyandsociety.org/vol11/iss2/art8/>

Clark, W. C. and Dickson, N. M. *Sustainability Science: the emerging research program*. PNAS, 2006. 100(14): 8059-8061. (3)

Frantzeskaki, N. & Loorbach D. *Governing societal transitions to sustainability*. *Int. J. Sustainable Development*, 2012. 151/2:19-36. (17)

Funtowicz, S.O. & Ravetz, J.R. *Science for the Post-Normal Age*. *Futures*. Sept. 1993. 739-755. (16)

Geels, F. (2011) *The multi-level perspective on sustainability transitions: responses to seven criticisms*. *Journal of Environmental Innovation & Societal Transitions*, 1 (1):24-40. (16)

Gibson C. C., Ostrom E. & Ahn T.K. *The concept of scale and the human dimensions of global change: a survey*. *Ecological Economics*. 2000. 32: 217–239. (18)

Jerneck, A., Olsson, L. Ness, B., Anderberg, S., Baier, M., Clark, E., Hickler, T., Hornborg, A., Kronsell, A., Lövbrand, E., & Persson, J. *Structuring sustainability science*. *Sustainability Science*. 2011. 6:69-82. (13)

Kates, R.W., Clark, W.C., Corell, R., Hall, J.M., Jaeger C.C., Lowe, I., McCarthy, J., Schellnhuber, H.J., Bolin, B., Dickson, N.M., et al. *Sustainability Science*. *Science*, 2001. 292(5517), 641-2. (2)

Jonathan Köhler, Frank W. Geels, Florian Kern, Jochen Markard, Elsie Onsongod, Anna Wieczorek, Floortje Alkemade, Flor Avelino, Anna Bergek, Frank Boons, Lea Fünfschilling, David Hess, Georg Holtz, Sampsa Hyysalo, Kirsten Jenkins, Paula Kivimaa, Mari Martiskainen, Andrew McMeekin, Marie Susan Mühlemeier, Bjorn Nykvist, Bonno Pel, Rob Raven, Harald Rohracher, Björn Sandén, Johan Schot, Benjamin Sovacool, Bruno Turnheim, Dan Welch, & Peter Wells. *Viewpoint: An agenda for sustainability transitions research: State of the art and future directions*. *Environmental Innovation and Societal Transitions* 2019. 31: 1–32 (32)

Lang, D. J., Wiek, A. Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., Thomas C. J., *Transdisciplinary research in sustainability science: practice, principles and challenges*. Sustainability Science. 2012. 7(Suppl. 1): 25-43. (18)

Mahmoud, M., Y. Liu, H., Hartmann, S., Stewart, T., Wagener, D., Semmens, R., Stewart, H., Gupta, D., Dominguez, F., Dominguez, D., Hulse, R., Letcher, B., Rashleigh, C., Smith, R., Street, J., Ticehurst, M., Twery, H., van Delden, R., Waldick, D., White, D. & Winter, L. *A formal framework for scenario development in support of environmental decision-making*. Environmental Modelling & Software 2009. 24: 798–808. (10)

McGinnis, M. Ostrom, E. Social-ecological system framework: initial changes and continuing challenges. Ecology & Society. 2014. 19(2). (12)

Meadows, D. *Thinking in Systems: A Primer (Chapters 1, 2, 4)*. 2008. White River Junction, Chelsea Green (selected parts only; pdf will be made available). ISBN: 1603580557, 9781603580557 (94)

Miller, T. R. *Constructing sustainability science: emerging perspectives and research trajectories*. Sustainability Science. 2013. 8:279-293. (14)

Nevens, F., Gorissen, L., Frantzeskaki, N. & Loorbach, D. *Urban Transition Labs: co-creating transformative action for sustainable cities*. Journal of Cleaner Production 2013. 50:111-122. (11)

Ostrom, E., *A General Framework for Analyzing Sustainability of Social-Ecological Systems*. Science, 2009. 325(24 July): p. 419-422. (4)

Partelow, S., Glaser, M., Solano Arce, S., Sá Leitão Barboza, R., Schlüter, A. (2018). Mangroves, fishers, and the struggle for adaptive comanagement: applying the social-ecological systems framework to a marine extractive reserve (RESEX) in Brazil. Ecology and Society 23(3):19. <https://doi.org/10.5751/ES-10269-230319> (20)

Polk, M. *Achieving the promise of transdisciplinarity: a critical exploration of the relationship between transdisciplinary research and societal problem solving*. Sustainability Science. 2014. 1-13. (13)

Rotmans, J. & Loorbach, D. *Complexity and Transition Management*. Journal of Industrial Ecology, 2009. 13:184–196. (12)

Spangenberg, J. H. *Sustainability science: a review, an analysis and some empirical lessons*. Environmental Conservation. 2011. 38(3):275–287. (12)

Spanò, M., Gentile, F., Davies, C., Laforteza, R. (2017) The DPSIR framework in support of green infrastructure planning: A case study in Southern Italy, Land Use Policy, 61:242-250 (8)

Swart R. J., Raskin, P. & Robinson, J. *The problem of the future: sustainability science and scenario analysis*. Global Environmental Change 2004.14:137–146. (9)

Wiek, A., Ness, B., Brand, F. S., Schweizer-Ries, P., & Farioli, F. *From complex systems analysis to transformational change: a comparative appraisal of sustainability science projects*. Sustainability Science. 2012. 7(1):5–24. (19)

Wiek, A. & Iwaniec, D. *Quality criteria for visions and visioning in sustainability science*. Sustainability Science, 2014. 9:497–512. (15) **366 pages**

Gender balance: first authors that I assume identify themselves as female are highlighted in blue. Men dominated academia and the field of sustainability science in the earlier years, unfortunately. And a good chunk of the articles are foundational materials. Things are much, much better now (even some research examining this as a part of the reading). I don't think it will be an issue as I continue to update the list in the future.

Total number of pages: 366

Justification for not reaching the recommended page count (1667): I keep them more than busy with other sorts of learning activities (e., group work, seminars, lectures). The activities I give them keep them busy 40 hours per week (as detailed in the schedule). If we decrease the reading (not the most active for of learning), then we need to cut down on the other learning activities.