



Literature for MESS33, Sustainability Science applies from autumn semester 2019

Literature established by The Board of the Lund University Centre for
Sustainability Studies on 2019-06-13 to apply from 2019-08-28

See appendix.

Hållbarhetsvetenskap, 10 högskolepoäng

Sustainability Science, 10 credits

MESS33 litteraturlista fastställd av LUCSUS styrelse den 13 juni 2019 (dnr STYR 2019/1087).

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)

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)

Ness, B., Urbel-Piirsalu, E., Anderberg, S., & Olsson, L. *Categorising tools for sustainability*. *Ecological Economics*. 2007. 60:498-508. (10)¹

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)

Parris, T. M. & Kates, R. W. Characterizing a sustainability transition: goals, targets, trends, and driving forces. *Proceeding of the National Academies, USA*. 2003. 100(14):8068-8073. (5)

New: 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)

New: 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)

¹ Note: Shared first authorship

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)

Note: first authors that I assume identify themselves as female are highlighted in blue.

Total number of pages: 390

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.