Literature for MESS33, Sustainability Science applies from autumn semester 2018

Literature established by The Board of the Lund University Centre for Sustainability Studies on 2018-06-14 to apply from 2018-09-03

See appendix.

Hållbarhetsvetenskap, 10 högskolepoäng

Sustainability Science, 10 credits

MESS33 litteraturlista fastställd av LUCSUS styrelse den 14 juni 2018 (Dnr STYR 2018/1069).

Burkhard B. & Müller F. *Encyclopedia of Ecology Ecological Indicators: Driver–Pressure–State–Impact–Response.* Elservier. 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)15

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)

Partelow, S. & Boda, C. S. A modified diagnostic social-ecological system framework for lobster fisheries: Case implementation and sustainability assessment in Southern California. *Ocean & Coastal Management,* 2015. 114, 204–217. (13)

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)

Smith, A., & Stirling, A., *The politics of social-ecological resilience and sustainable socio-technical transitions'* Ecology and Society. 2010. 15(1):11. (13)

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

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)

[1] Note: Shared first authorship

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

Total number of pages: 388

First authors assumed to identify themselves as female are highlighted in blue.

Literature gender imbalance justification (5 of 27 female first authorship): After several years, I have finally narrowed the reading list to something that is informative (for students) for each individual course theme/block as well as foundational readings for the course. I suggest that revisit this issue I the process of redeveloping the LUMES program (since it hasn't been decided that we will continue with this course).