Litteraturlista för MESB01, Biogeovetenskap gällande från och med höstterminen 2019

Litteraturlistan är fastställd av Styrelsen för Lunds universitets centrum för studier av uthållig samhällsutveckling 2019-06-13 att gälla från och med 2019-08-28

Se bilaga.

Biogeovetenskap, 10 högskolepoäng

Earth Systems Science, 10 credits

MESB01 litteraturlista fastställd av LUCSUS styrelse den 13 juni 2019 (dnr STYR 2019/1087).

Adhikari, K., & Hartemink, A. E. (2016). Linking soils to ecosystem services—A global review. *Geoderma*, *262*, 101-111. ***[11 pages]***

Bellard, C., Leclerc, C., Leroy, B., Bakkenes, M., Veloz, S., Thuiller, W., & Courchamp, F. (2014). Vulnerability of biodiversity hotspots to global change. *Global Ecology and Biogeography*, *23*(12), 1376-1386. ***[11 pages]***

Bennett, E. M., W. Cramer, ***A. Begossi***, ***G. Cundill***, S. Díaz, B. N. Egoh, ***I. R. Geijzendorffer***, C. B. Krug, ***S. Lavorel*** & E. Lazos (2015) Linking biodiversity, ecosystem services, and human well-being: three challenges for designing research for sustainability. *Current opinion in environmental sustainability*, 14**,** 76-85. ***[9 pages]***

Bierkens, M. F. (2015). Global hydrology 2015: State, trends, and directions. *Water Resources Research*, *51*(7), 4923-4947. ***[25 pages]***

Campbell, B. M., ***D. J. Beare, E. M. Bennett***, J. M. Hall-Spencer, J. S. Ingram, F. Jaramillo, R. Ortiz, N. Ramankutty, J. A. Sayer & D. Shindell (2017) Agriculture production as a major driver of the Earth system exceeding planetary boundaries. *Ecology and Society*, 22. ***[11 pages]***

Brian J. Skinner, ***Barbara W. Murck*** 2011. The Blue Planet: An Introduction to Earth System Science. Wiley, 3rd Edition. ISBN: 978-0-471-23643-6. Pp. 672 ***[pages 6-28; 223-254; 320-346 = 79 pages]***

IPBES (2018): Summary for policymakers of the assessment report on land degradation and restoration of the Intergovernmental SciencePolicy Platform on Biodiversity and Ecosystem Services. R. Scholes, L. Montanarella, A. Brainich, N. Barger, ***B. ten Brink, M. Cantele,*** B. Erasmus, J. Fisher, T. Gardner, T. G. Holland, F. Kohler, J. S. Kotiaho, G. Von Maltitz, G. Nangendo, R. Pandit, J. Parrotta, M. D. Potts, S. Prince, M. Sankaran and L. Willemen (eds.). IPBES secretariat, Bonn, Germany. (Found here) ***[44 pages]***

IPBES 2019. Summary for policymakers of the global assessment report on biodiversity and ecosystem services – unedited advance version. (Found here) ***[39 pages]***

Keesstra, S. D., J. Bouma, J. Wallinga, P. Tittonell, P. Smith, ***A. Cerdà,*** *L. Montanarella*, J. N. Quinton, Y. Pachepsky & W. H. Van Der Putten (2016) The significance of soils and soil science towards realization of the United Nations Sustainable Development Goals. *Soil*. ***[18 pages]***

Naeem, S., D. E. Bunker, A. Hector, M. Loreau & C. Perrings. 2009. *Biodiversity, ecosystem functioning, and human wellbeing: an ecological and economic perspective*. Oxford University Press Perz, S. G. *Collaboration Across Boundaries for Social-Ecological Systems Science: Experiences Around the World*. Springer. ***[pages 3-13; 87-93; 167-177; and 195-208 = 39 pages]***

Nyingi, W., Oguge, N., Dziba, L., Chandipo, R., Didier, T. A., Gandiwa, E., Kasiki, S., Kisanga, D., Kgosikoma, O., Osano, O., Tassin, J., Sanogo, S., von Maltitz, G., Ghazi, H., Archibald, S., Gambiza, J., Ivey, P., Logo, ***P. B., Maoela, M. A., Ndarana,*** T., Ogada, M., Olago, D., Rahlao,

S., and van Wilgen, B. Chapter 4: Direct and indirect drivers of change in biodiversity and nature's contributions to people. In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for Africa. Archer, E., Dziba, L., Mulongoy, ***K. J., Maoela,*** M. A., and Walters, M. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany, pp. 207–296. (Found here) ***[89 pages]***

Scanlon, B. R., B. L. Ruddell, P. M. Reed, R. I. Hook, C. Zheng, V. C. Tidwell & S. Siebert (2017) The food-energy-water nexus: Transforming science for society. *Water Resources Research,* 53**,** 3550-3556. ***[6 pages]***

Sivapalan, M. (2015) Debates—Perspectives on socio-hydrology: Changing water systems and the "tyranny of small problems"—Socio-hydrology. *Water Resources Research,* 51**,** 4795-4805. ***[10 pages]***

Steffen, W., ***J. Rockström***, K. Richardson, T. M. Lenton, C. Folke, D. Liverman, C. P. Summerhayes, A. D. Barnosky, S. E. Cornell & M. Crucifix (2018) Trajectories of the Earth System in the Anthropocene. *Proceedings of the National Academy of Sciences,* 115**,** 8252-8259. ***[7 pages]***

Tóth, G., T. Hermann, M. R. da Silva & L. Montanarella (2018) Monitoring soil for sustainable development and land degradation neutrality. *Environmental monitoring and assessment,* 190**,** 57. ***[4pages]***

Turner, David. 2018. The Green Marble: Earth System Science and Global Sustainability. Columbia University Press. 328 pages. **ISBN-13:** 978-0231180610 328 pages ***[Course book: 328 pages]***

UNEP 2019. Global Environment Outlook - GEO-6: Healthy Planet, Healthy People. Paul Ekins; ***Joyeeta Gupta***; Pierre Boileau (Editors). Cambridge University Press. Cambridge, UK. Link: https://www.unenvironment.org/resources/global-environment-outlook-6

- Summary for policy-makers (found here) ***[28 pages]***
- Regional analysis (found here) ***[21 pages]***
- Thematic analysis – water (found here) ***[6 pages]***
- Thematic analysis – Climate action (found here) ***[5 pages]***
- Thematic analysis – Land and biodiversity (found here) ***[8 pages]***

Verburg, P. H., N. Crossman, ***E. C. Ellis***, A. Heinimann, P. Hostert, O. Mertz, H. Nagendra, T. Sikor, K.-H. Erb & N. Golubiewski (2015) Land system science and sustainable development of the earth system: A global land project perspective. *Anthropocene,* 12**,** 29-41. ***[12 pages]***

Vogel, R. M., U. Lall, ***X. Cai,*** B. Rajagopalan, P. K. Weiskel, R. P. Hooper & N. C. Matalas (2015) Hydrology: The interdisciplinary science of water. *Water Resources Research,* 51**,** 4409-4430. ***[21 pages]***

Total number of pages: 831 **Female authors in blue**.

Reason for fewer number of references: Being the first course of the LUMES programme, this course has integrated within it other learning activities that would demand extensive literature consultation, reading and evaluation for fitness of use. This is the case with the module on library search that will be given by staff from the Social Sciences Library.