UNIVERSITÉ DU LUXEMBOURG

SUSTAINABLE DEVELOPMENT

Schedule: Global Environmental Change in the Anthropocene

Open Course, Campus Belval, Winter Semester 2015/16

Sessions in the winter semester 2015/16	Thursdays Date	Lecturers	Time * Rooms
Session 1. Global Environmental Change in the Anthropocene • Overview: What role do humans play in global environmental change? • New models and systems approaches for research on interactions between the environmental, social, and technological spheres (Meadows, Vester, Oestrom – merits and limitations)	**15.10**	Ariane König, University of Luxembourg	**15.45-17.30** **MSA | 4.170**
Session 2. Global warming, carbon cycle, and ocean acidification. (part 1) An introduction to systems science to understand interdependencies in short term climate change	**22.10**	Tonie Van Dam, University of Luxembourg	**15.45-18.15** **MSA | 4.170**
Session 3. Sea level, hydrological hazards and geodetic monitoring (part 1) • Sea level variations: From past to present. • Hydrological hazards: Vulnerability, risk, mitigation and adaptation.	**29.10**	Norman Teferle, University of Luxembourg	**15.45-18.15** **MSA | 4.170**
All Saints Break			
Session 4. Sea level, hydrological hazards and geodetic monitoring (part 2) • Geodetic monitoring and the Global Geodetic Observing System • Uncertainties within the Intergovernmental Panel on Climate Change Reports.	**12.11**	Norman Teferle,	**15.45-18.15** **MSA | 4.170**
Session 5. Global warming, carbon cycle, atmospheric ozone, and ocean acidification (part 2)	**19.11**	Tonie Van Dam	**15.45-18.15** **MSA | 4.170**
Session 6. Land-use change and implications for agricultural systems • The global farming system • Agricultural crises, land use change, and revolutions through history	**26.11.**	Nicolas Dendoncker, University of Namur	**15.45-19.15** **MSA | 4.170**
Session 7. Impacts, and the use of ecosystem services as indicator for transition to more sustainable agriculture • Consequences of the anthropocenic agricultural system: Detrimental consequences in the North and South; Global and European agricultural policies. • Ecosystems services and transition to a new sustainable agricultural system	**03.12**	Nicolas Dendoncker	**15.45-19.15** **MSA | 4.170**
Session 8. What can go wrong with quantitative data and mathematical methods? A tale of caution on the use of numbers in the face of uncertainty and complexity Uncertainty assessment and representation – the NUSAP model	**10.12.**	Jerome R. Ravetz, Oxford Ariane König Laurent Pfister, Luxembourg Institute of Science & Technology (LIST)	**15.45-18.15** **MSA | 4.040**
Session 9. Anticipating challenges at the food water energy nexus Transformative sustainability science as a new approach to co-create actionable knowledge with diverse stakeholders in governments, science, the private sector and organised civil society	**17.12.**	Ariane König Laurent Pfister	**15.45-18.15** **MSA | 4.170**