

Course Title:	Climate and Society: Human-Environment Interactions and Conflict Geography
Course-No.:	63-181 / 63-907
Lecturer:	Jürgen Scheffran
Time:	Thursday 12:15 – 13:45
Location:	Grindelberg 5, Room 008
Start:	24.10.2013
Credit Points:	3

Class Content: Based on a framework of human-environment interactions, the class will assess the complex relationship between climatic systems and social systems, with a focus on the security and conflict dimensions. The first part will introduce the fundamentals of the climate system and other components of the Earth system in the context of the Anthropocene, and discuss the effect of humans on climate change and its impact on humans. Based on an analysis of the geographic distribution of natural resources and environmental change, the conditions and factors of resource conflicts will be critically assessed and discussed, referring to the literature on the tragedy of the commons. Particular attention will be given to the debate on climate change and security, within the framework of linkages between climate stress, natural resources, human security, and societal stability. Based on empirical evidence regarding key indicators and data on climatic and conflict events, models and hypotheses on these relationships will be analysed. Following the assessment by the German Advisory Council on Global Change, major conflict constellations of climate change will be analysed, including water scarcity, food insecurity, flood and storm disasters and environmental migration. These issues will be exemplified in different regional case studies for hot spots of climate change and environmental conflicts. A view will be given to the emerging policy debates on the securitization of climate change and institutional processes to address these issues, including international negotiations on climate change mitigation and adaptation, global governance and low-carbon society. Finally, an integrated perspective will be taken within the framework of human-environment interactions and the role of concepts of conflict resolution, international cooperation and sustainable peace.

Class Schedule:

- 24.10. Climate change and human-environment interactions
- 31.10. Processes and components of the climate system in the Earth system
- 7.11. Energy, greenhouse gas emissions and anthropogenic global warming
- 14.11 Ecosystems, natural resources and Tragedy of the Commons
- 21.11 Water, food and human security
- 28.11. Natural disasters, sea-level rise and environmental migration
- 5.12. Climate change, environmental conflicts and societal stability
- 12.12. Regional cases studies: Europe and Mediterranean region
- 19.12. Regional case studies: Africa
- 9.1. Regional case studies: Asia and Pacific region
- 16.1. Regional case studies: Latin America, North America and Arctic region
- 23.1. Integrated approaches and cooperative policies in climate-society interaction
- 30.1. Final Exam

Selected Literature (more references will be provided during class):

- Barry, Roger G.; Chorley, Richard J. (2003) *Atmosphere, weather, and climate*, Routledge.
- Brauch, Hans Günter et al. (eds) (2011), *Coping with Global Environmental Change, Disasters and Security*. Berlin: Springer.
- Gebhardt, H., Glaser, R., Radtke, U., Reuber, P. (eds.) (2012) *Geographie - Physische Geographie und Humangeographie*, Berlin: Springer.
- Glaser, R., Hauter, C., Faust, D., Glawion, R., Saurer, H., Schulte, A., Sudhaus, D. (2010) *Physische Geographie kompakt*, Berlin: Springer
- Gleditsch, Nils Petter (2012) Special issue on climate change and conflict, *Journal of Peace Research* 49.
- Goudie, Andrew (2007) *Physische Geographie*, Springer Spektrum.
- Grover, Velma (ed.) (2008) *Global Warming and Climate Change*, Science Publishers (2 vol.).
- Intergovernmental Panel on Climate Change (IPCC) (2007). *Climate Change 2007 - Climate Change Impacts, Adaptation and Vulnerability*. Working Group II, 4th Assessment Report, Geneva: Cambridge University Press).
- IPCC (2013) *Climate Change 2013: The Physical Science Basis*, Intergovernmental Panel on Climate Change, IPCC WGI AR5 4th Assessment Report.
- Knox, Paul L., Marston, Sallie A., Gebhardt, Hans, Meusburger, Peter, Wastl-Walter, Doris (Hrsg.) (2008) *Humangeographie*, Berlin: Springer.
- Knieling, Jörg; Filho, Walter Leal (eds.)(2013) *Climate Change Governance*, Springer.
- Moseley, William G., Perramond, Hapke, Holly M. (2014) *An Introduction to Human-Environment Geography*, Wiley-Blackwell.
- Neelin, J. David (2011) *Climate Change and Climate Modeling*, Cambridge University Press.
- Pielke, Roger (2010) *The Climate Fix - What Scientists and Politicians Won't Tell You about Global Warming*, New York, Basic Books.
- Schönwiese, Christian-Dietrich (2013) *Klimatologie*, 4.th edition, UTB.
- WBGU (2008) *World in Transition – Climate Change as a Security Risk*, German Advisory Council on Global Change, Berlin: Springer, http://www.wbgu.de/wbgu_jg2007.html.
- Scheffran, J.; Broszka, M.; Brauch, H.G.; Link, P.M.; Schilling, J. (eds.) (2012) *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability*, Berlin, Springer Verlag, Hexagon Series Vol. 8.
- Scheffran, J., Brzoska, M., Kominek, J., Link, P.M. & Schilling, J. (2012) Climate change and violent conflict, *Science*, 336: 869-871.
- Scheffran, J. & Battaglini, A. (2011) Climate and Conflicts - The security risks of global warming, *Regional Environmental Change*, 11 (Suppl. 1), 27-39.