

# Programme

Time	Topic	Responsible	Material
<b>Sunday, August 21</b>			
Arrival			
<b>Monday, August 22</b>			
9:00 - 9:30	Welcome	JCR	Course programme
9:30 - 10:30	Introduction to adaptive management	HJH	IPCC (2007) Milly et al. (2008) Huntjens et al. (2010) Henriksen and Barlebo (2008)
<i>Coffee</i>			
10:45 - 13:30	An introduction to participatory methods and to planning participatory processes	MH	Processes: Moellenkamp et al. (2010) von Korff et al. (2010) Methods: Hare et al. (2006) Hare et al. (2005) Kaner (2007)
<i>Lunch</i>			
13:30 - 15:00	Scenario development - an introduction to concepts, methods and tools	KK	Kok and Veldkamp (2011) Kok et al. (2011) Kok (2009) Kok and van Delden (2009)
15:00 - 16:30	Risk perception	LE	Lorenzoni and Pidgeon (2006) Stern (2000)
<i>Coffee</i>			
16:30 - 18:00	PhD presentations of own poster (2 minutes per student) + poster session + refreshments + formation of groups	Students	

**Tuesday, August 23**

9:00 - 9:45	Introduction to Horsens case study on water	HJH	Horsens case + TOR
9:45 - 10:30	Introduction to Finnish case study on roads <i>Coffee</i>	AP	
11:00 - 12:45	Exersize works <i>Lunch</i>	Students	
13:45 - 15:30	Uncertainty concepts and tools  <i>Coffee</i>	JCR	Refsgaard et al. (2007) van der Keur et al. (2008)
15:45 - 18:00	Exersize works	Students	
19:00	<i>Course dinner</i>		

**Wednesday, August 24**

9:00 - 10:15	Discussion of issues arising from group work <i>Coffee</i>	Plenary	
10:30 - 12:00	Scenario development - practical examples  <i>Lunch</i>	KK	Kok and Veldkamp (2011) Kok et al. (2011) Kok (2009) Kok and van Delden (2009)
13:00 - 14:15	Challenges of organising participatory processes in practice  <i>Coffee</i>	MH	Cooke and Kothare (2007) Daniell et al. (2010) Hare (2011)
14:30 - 18:00	Exersize works	Students	

**Thursday, August 25**

9:00 - 10:15	Acceptability of policy  <i>Coffee</i>	LE	Eriksson et al. (2006) Samuelson (1993)
10:30 - 12:30	Exercize works <i>Lunch</i>	Students	
13:30 - 14:45	Social cost-benefit analysis in the context of regional adaptation planning <i>Coffee</i>	AP	
15:00 - 18:00	Exercize works. Prepare draft reports	Students	

**Friday, August 26**

8:30 - 10:00	Finalisations of presentations and reports	Students
	<i>Coffee</i>	
10:00 - 10:40	Icelandic experience in adaptive management of natural hazards	SK
10:00 - 12:45	Presentation of students' group work Horsens water managers will be present and comment/discuss	All
	<i>Lunch</i>	
13:45 - 14:30	Presentation of students' group work Horsens water managers will be present and comment/discuss	Students
14:30 - 15:30	Course evaluation	Students
15:30 - 16:00	Refreshments and closure	

**Lecturers and instructors**

KK	Kasper Kok, Wageningen University
MH	Matt Hare, Seecon
LE	Louise Eriksson, Umeå University
HJH	Hans Jørgen Henriksen, GEUS
JCR	Jens Christian Refsgaard, GEUS
AP	Adriaan Perrels, FMI
SK	Sigrún Karlsdóttir, IMO
FU	Frederik Uldal, University of Copenhagen

**Availability during week**

Monday noon - Wednesday afternoon
Sunday night - Thursday afternoon
Monday noon - Thursday noon
All week
All week
All week
All week
Logistic support

## **Course material**

### **Papers and book chapters - recommended reading**

**Cooke** B, Kothari U (2007) Participation: the new tyranny? (4th edition) Zed Books: New York.

**Daniell** KA, White I, Ferrand N, Ribarova IS, Coad P, Rougier J-E, Hare MP, Jones NA, Popova A, Rollin D, Perez P, Burn S (2010) Co-engineering participatory water management processes: theory and insights from Australian and Bulgarian interventions. *Ecology and Society* 15(4):11  
<http://www.ecologyandsociety.org/vol15/iss4/art11>

**Eriksson** L, Garvill J, Nordlund AM (2006). Acceptability of travel demand management measures: The importance of problem awareness, personal norm, freedom, and fairness. *Journal of Environmental Psychology*, 26, 15-26. doi:10.1016/j.jenvp.2006.05.003

**Hare** M P, Krywkow J (2005) Participatory processes for the design of water storage areas. Technical report, Seecon Deutschland GmbH, Osnabrück. Seecon TR no. 01/2005 for the EU Interreg IIIB TRUST project. Short version available in electronic format.

**Hare** MP, Barreteau O, Beck MB, Letcher RA, Mostert E, Tabara JD, Ridder D, Cogan V, Pahl-Wostl C (2006) Methods for stakeholder participation in water management. Chapter 8 in Giupponi, C. Jakeman, A.J., Karssenbergh, D. & Hare, M. (Eds) Sustainable management of water resources: an integrated approach. Edward Elgar: Chichester.

**Hare** MP (2011) Forms of participatory modelling and its potential for widespread adoption in the water sector. *Environmental Policy and Governance*. DOI: 10.1002/eet.590

**Henriksen** HJ, Barlebo HC (2008) Reflections on the use of Bayesian belief networks for adaptive management. *Journal of Environmental Management*, 88, 1025-1036. doi:10.1016/j.jenvman.2007.05.009

**Huntjens** P, Pahl-Wostl C, Grin J (2010) Climate change adaptation in European river basins. *Reg. Environ. Change*, 10, 263-284. DOI 10.1007/s10113-009-0108-6

**IPCC** (2007) Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva, Switzerland, 104 pp.

**Kaner** S (2007) Facilitator's Guide to Participatory Decision-Making. Jossey-Bass: San Francisco.

**Kok** K (2009) The potential of Fuzzy Cognitive Maps for semi-quantitative scenario development, with an example from Brazil. *Global Environmental Change* 19: 122-133. doi:10.1016/j.gloenvcha.2008.08.003

**Kok** K, Van Delden H (2009) Combining two approaches of integrated scenario development to combat desertification in the Guadalentín watershed, Spain. *Environment and Planning B* 36: 49-66. doi: 10.1068/b32137

**Kok** K, Veldkamp TA (2011) Scale and governance: conceptual considerations and practical implications. Guest editorial special feature Scale and Governance. Ecology and Society 16(2): 23. [online] URL: <http://www.ecologyandsociety.org/vol16/iss2/art23/>

**Kok** K, van Vliet M, Bärlund I, Dubel A, Sendzimir J (2011) Combining participative backcasting and explorative scenario development: Experiences from the SCENES project. Technological Forecasting and Social Change 78(5): 835-851. doi:10.1016/j.techfore.2011.01.004

**Lorenzoni** I, Pidgeon NF (2006). Public views on climate change: European and USA perspectives. Climatic Change, 77, 73-95. DOI: 10.1007/s10584-006-9072-z

**Moellenkamp**, S., Lamers, M., Huesmann, C., Rotter, S., Pahl-Wostl, C., Speil, K., Pohl, W. (2010). Informal participatory platforms for adaptive management – insights into niche finding, collaborative design and outcomes from a participatory process in the Rhine. Ecology and Society. 15(4):41  
<http://www.ecologyandsociety.org/vol15/iss4/art41/>

**Milly** PCD, Betancourt J, Falkenmark M, Hirsch RM, Kundzewicz ZW, Lettenmaier DP, Stouffer RJ (2008) Stationarity Is Dead: Whither Water Management. Science, 319, 573-574.

**Refsgaard** JC, van der Sluijs, Højberg AL, Vanrolleghem PA (2007) Uncertainty in the environmental modelling process – A framework and guidance. Environmental Modelling & Software, 22, 1543-1556. <http://dx.doi.org/10.1016/j.envsoft.2007.02.004>

**Samuelson** CD (1993). A multiattribute evaluation approach to structural change in resource dilemmas. Organizational Behavior and Human Decision Processes, 56, 407-424.  
**Stern** PC (2000). Toward a coherent theory of environmentally significant behavior. Journal of Social Issues, 56, 407-424.

**van der Keur** P, Henriksen, HJ, Refsgaard JC, Brugnach M, Pahl-Wostl C, DeWulf A, Buiteveld H (2008) Identification of major sources of uncertainty in current IWRM practice. Illustrated for the Rhine basin. Water Resources Management, 22, 1677-1708. <http://dx.doi.org/10.1007/s11269-008-9248-6>

**van Roosmalen** L, Sonnenborg TO, Jensen KH (2009) Impact of climate and land use change on the hydrology of a large-scale agricultural catchment. WATER RESOURCES RESEARCH, VOL. 45, W00A15, doi:10.1029/2007WR006760

**Von Korff** Y, d'Aquino P, Daniell KA, Bijlsma R (2010) Designing participation processes for water management and beyond. Ecology and Society 15(3): 1.  
<http://www.ecologyandsociety.org/vol15/iss3/art1/>

### **Case study material**

**Henriksen** HJ (2011) Horsens Fjord Case. Background document for case study, 18 pp.

**Refsgaard** JC, Henriksen HJ (2011) Horsens case - Break out groups. Tasks for group work. 3 pp.