



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Samhällsplanering Risk Based Land Use Planning

VRSN20, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED BI/RH

Date of Decision: 2023-04-12

General Information

Main field: Disaster Risk Management and Climate Change Adaptation.

Compulsory for: MKAT1

Language of instruction: The course will be given in English on demand

Aim

To provide the student with sufficient knowledge to allow him/her to participate at early stages in the planning process in such way that risk assessments can be integrated and used to create a basis at a strategic stage of the planning process, with the objective of achieving a resilient society.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- show a general understanding of the planning process and being familiar with some of the most central concepts related to land use planning.
- show an understanding of what types of risks being relevant to take into consideration at different levels of land use planning.
- show an understanding for what actors and interests that are involved in the planning process, and how they interact with questions relating to risk assessment.

Competences and skills

For a passing grade the student must

- be able to identify and analyse those risks and vulnerable objects that exist in the studied geographical area and be able to develop input to a plan proposal in such way that

- existing preconditions are taken into consideration.
- be able to suggest and argue for well-considered measures that in a planning context contribute to a resilient society.
- be able to present and discuss relevant risk-related questions in land use planning, verbally as well as in writing, with interested stakeholders.
- be able to search for, and assess information with a high degree of independence and to assume responsibility that the group work carried out is completed and reported on within given time-frames.

Judgement and approach

For a passing grade the student must

- demonstrate a capacity to assess and relate to trade-offs between risk-related questions and other interests in land use planning.
- demonstrate a capacity to assess what type and level of detail of risk-related questions that are most relevant to handle in different planning processes.

Contents

The course elaborates on the nature and scope of land use planning and the importance of such a process for shaping urban risk. The course is structured around a number of course elements including lectures and readings on the topics of risk governance, vulnerability, decision-making and treatment of uncertainties, as well as recovery, reconstruction and relocation. Moreover, the course includes elements striving at developing the student's skills and understanding of how risk assessments can be conducted within the spatial planning framework. The course contains both individual assignments and a group assignment.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Examination is carried out individually through submission of individual assignments and an oral examination, and in group through oral examination and written report of the project assignments and critical review of another project assignment.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts

Code: 0120. **Name:** Individual Assignment.

Credits: 1. **Grading scale:** UG. **Assessment:** Passed individual assignment **Contents:** Written assignments.

Code: 0220. **Name:** Group Assignment.

Credits: 3,5. **Grading scale:** UG. **Assessment:** Passed project assignment **Contents:** Written assignments, oral presentation and external reviewing of other students assignments.

Code: 0320. **Name:** Oral Examination.

Credits: 3. **Grading scale:** UG. **Assessment:** Approved oral examination.

Admission

Assumed prior knowledge: Basic course in risk assessment with a minimum of 7,5 credits, e.g. VRSN05 Foundations for Risk Assessment and Management, VBRN45 Risk Assessment in Fire Protection Engineering, VRSN25 Risk Assessment in the Safety Area

or VBR180 Risk Analysis Methods.

The number of participants is limited to: 30

Selection: Completed university credits within the program. Within programs where the course is given as a compulsory course students are guaranteed admission. Thereafter priority is given to students enrolled in programs that include the course in the curriculum.

The course overlaps following course/s: VBR110, VRSN30, EXTP70

Reading list

- Wisner, B., Blaikie, P., Cannon, T. & Davies, I.: At risk: natural hazards, people's vulnerability and disasters – Second edition. Routledge: New York, 2003.
- Bankoff, G.; Frerks, G. and Hilhorst, D. (eds) : Mapping Vulnerability. Disasters, Development & People. Earthscan. , 2004.
- Cedergren, A., & Hassel, H. : A Risk Assessment Framework for Land Use Planning. Lund University: Lund, 2018.
- Hallegatte, S. : Strategies to adapt to an uncertain climate change. 2009. *Global Environmental Change*, 19, 240–247.
- Wamsler, C. : Cities, Disaster Risk and Adaptation. Routledge: New York, 2014.
- World Bank: Guide to Climate Change Adaptation in Cities. World Bank: Washington, 2011.
- Gaillard, J. C., & Mercer, J. : From knowledge to action: Bridging gaps in disaster risk reduction. *Progress in Human Geography*, 37(1), 93–114. , 2013.
- Jordan, E., Javernick-Will, A., & Amadei, B.: Post-Disaster Reconstruction: Lessons from Nagapattinam District, India. *Development in Practice*, 25(4): 518–34. , 2015.
- Johnson, L. A., & Olshansky, R. B. : The Road to Recovery: Governing Post-Disaster Reconstruction. *Land Lines* 25(3): 14–21., 2013.
- Coppola, D. P: Introduction to international disaster management, (2 ed). Oxford: Butterworth-Heinemann (Elsevier)., 2011.
- FAO Food and Agriculture Organization of the United Nations.: Good governance in land tenure and administration. Rome, 2007.
- FAO Food and Agriculture Organization of the United Nations.: Assessing and Responding to Land Tenure Issues in Disaster Risk Management. Rome, 2011.
- Johnson, C. : Creating an enabling environment for reducing disaster risk: Recent experience of regulatory frameworks for land, planning and building in low and middle-income countries. Paper prepared for the Global Assessment Report on Disaster Risk Reduction, 2011.
- Maier, H.R., Guillaume, J.H.A., van Delden, H., Riddell, G.A., Haasnoot, M., & Kwakkel, J.H. : An uncertain future, deep uncertainty, scenarios, robustness and adaptation: How do they fit together?. 2016, ISBN: Environmental Modelling & Software, 81, 154-164.
- Raju, E. : Housing reconstruction in disaster recovery: a study of fishing communities post-tsunami in chennai, India. *PLoS Currents*, 5., 2013.
- Tierney, K. : Disaster Governance: Social, Political, and Economic Dimensions. *Annual Review of Environment and Resources* 37 (1): 341–63, 2012.
- Thune Hedström, R. T., & Lundström, M. J.: Swedish Land-use Planning Legislation. In M. J. Lundström, C. Fredriksson, & J. Witzell (Eds.), *Planning and sustainable urban development in Sweden* (pp. 69–81). Stockholm: Swedish Society for Town & Country Planning, 2013.
- Flyvbjerg, B. (n.d.): A Brief Example of Truth and Lying. Excerpt from the book Flyvbjerg, B. *Rationality and Power: Democracy in Practice*, University of Chicago

Press, Chicago, 1998.

- Kuran, C.H.A., et al: Vulnerability and vulnerable groups from an intersectionality perspective. *International Journal of Disaster Risk Reduction* (50), 1-8, 2020.
- Dow, K., & Downing, T. E.: *The Atlas of Climate Change*. University of California Press: Berkeley, 2011.
- Shaw, R., Colley, M., & Connell, R.: *Climate change adaptation by design: a guide for sustainable communities*. London, 2007.
- Sou, G. & Webber, R.: Disruption and recovery of intangible resources during environmental crises: Longitudinal research on “home” in post-disaster Puerto Rico, *Geoforum*. Elsevier, 106(August), pp. 182–192, 2019.

Contact and other information

Course coordinator: Alexander Cedergren, alexander.cedergren@risk.lth.se

Course administrator: Linnéa Ekman, linnea.ekman@ebd.lth.se

Further information: Active participation in group work is mandatory. Each group member must be able to present and answer for the contents of the joint report. A student who does not meet the demands of active participation, or disregard their obligations, can be replaced to another group or failed by the examiner.