



Faculty of Health, Science and Technology
Risk Management

Syllabus

Integrated Water and Flood Risk Management

Course Code:	CCGA09
Course Title:	Integrated Water and Flood Risk Management <i>Vattenförvaltning och hantering av översvämningsrisker</i>
Credits:	15
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

Major Field of Study:
RHA (Risk Management)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2016-08-25, and is valid from the Spring semester 2017 at Karlstad University.

Prerequisites

At least 30 ECTS credits, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

- give an account of the basic hydro-meteorological processes that cause floods,
- explain how climate change can be expected to impact flood risks in Sweden and Europe,
- give an account of the principles of the EU Water Framework Directive and the EU Floods Directive, and how these can serve as a basis for modern water management,
- give an account of different ways of managing flood risks through, for instance, risk analysis and action plans,
- explain how water management and flood risks relate to sustainable development, and
- critically evaluate and reflect on the societal management of flood risks.

Content

This is a web-based course. Instruction is in the form of streamed lectures, web seminars and hand-in assignments.

The course addresses basic hydro-meteorological conditions for flooding. Issues of water quality and flood risks in relation to a changing climate are also addressed. Students acquire both general and in-depth knowledge of the EU Water Framework Directive and the EU Floods Directive. Students explore if and how the implementation of the EU Floods Directive has led to improved flood risk management. The course also addresses how the implementation of integrated water management can be achieved in relation to a sustainable development. The course includes drawing conclusions on the

basis of previous floods and considering how to use this knowledge for preventive purposes.

Reading List

See separate document.

Examination

Assessment is individual and based on hand-in assignments and participation in online seminars.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.