



**KTH Architecture and
the Built Environment**

PROJECT SUSTAINABLE URBAN DEVELOPMENT

Assessments, Planning and Processes
15 credits

AG2809

29 August 2017 – January 12 2018

If you have questions regarding the course, please use e-mail primarily. Canvas will be used for information during the course so have a look there regularly. All course documents will be posted on Canvas.

Responsible teacher

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Examiner

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Administrator

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¹ There will be a new course administrator recruited during September.

INTRODUCTION

Collaboration with SUPD Studio Urban Ecologies

The course collaborates with the SUPD Studio Urban Ecologies (AD286). The collaboration will mainly take place in the initial phase of background research, i.e. understanding and characterising Södertälje municipality from a number of different and intersecting perspectives.

Our study contexts – Rethinking water in Södertälje

Water is the source of any life on our planet earth. Our bodies consist up to 65% of water, and it also plays a key role in our everyday life. Especially since we have lost our human relations with water in the recent decades, it is nowadays considered as one of the most important common resource which is threatened on global scale. While Sweden is still considered as one of the water richest countries in the world, the Baltic Sea is one of the most threatened waterbodies and has therefore direct impact on the health of the freshwater available locally. Within this course we will critically explore our human historical cultural and ecological relations with water in the area of Södertälje. How much water do we consume in our daily lives and how can we become more efficient in our use of water? How much water is used for the growth of one apple or one avocado? And how is water influencing our humans and the planets wellbeing? Based on two collaborative research assignments the studio will investigate current challenges and design scenarios to reimagine resilient and sustainable futures.

The bioregion of Södertälje will be used as model and testing ground for our investigations and inventories, which will become documented in narratives, mappings and new visions. The local conditions in Södertälje will become the source of our design process. Södertälje as a bioregion sets up a great example for ecological systems which have been influenced by humans interaction and exploitation for centuries. Södertälje is located in the typical Mälardalen region landscape, characterised by its small hilly morphology shaped by the latest glaciation 10 000 years ago. The moraine covered hilltops with coniferous forests are surrounded by valleys with deciduous trees or open fields shaped by centuries of agriculture in clay rich soils. Södertälje has shorelines both to the freshwater lake Mälaren and to the Baltic Sea including part of the Stockholm archipelago. In ancient history, the location of Södertälje was a strait where the water way was open between Saltsjön and Mälaren. It was a passage on the way to Sweden's first town Birka on Björkö island in lake Mälaren. The ground in this part of Sweden rose slowly from the ancient glaciation pressure and took the shape of an isthmus, a land tongue connecting two landmasses and separating saltwater and freshwater. The need for passage remained however so people now pulled the boats and goods across the isthmus. A few hundred years passed, and finally, a canal was dug and the water way was again open. On land the road lead through the isthmus towards the future capital Stockholm. Different flows coincided and a concentration of people occurred at the cross road of water and land transportations.

Södertälje municipality is today a multi-cultural society² of 94 000 people and the population is projected to grow by 11 % until 2026. With very high ambitions of sustainable development this poses challenges in how to combine social, ecological and economic interests. (See more at the municipal website) Presently Södertälje is in a period of change from being dominated by two large industries – Scania truck manufacturer and AstraZeneca Pharmaceuticals that have both reorganized into smaller units in the city – to a focus on sustainable food production and reembracing its role as a transportation hub for waterway transports to and from lake Mälaren. Everyday 40 large ships pass Södertälje harbor and approximately 5 million tons of goods are transported through the canal yearly. Järna is the second largest city in Södertälje municipality and is since long time the center for the anthroposophical movement in Sweden.

² 52% of the population have been born outside Sweden or both their parents have been born outside of Sweden.

Within the course we will investigate how urbanization and ecology can interact and reinforce each other through designing strong future scenarios for the bioregion of Södertälje. Within the studio we aim at investigation the historical and cultural values of the regions origin. Water has always been the main driver for the development of local economies throughout the recent centuries. Today water is a wicked problem and the health of our waters is directly or indirectly impacting the majority of human activities.

Which connections are relevant today and what can we learn from history when searching for local resources that can act as starting point in building a future society where culture, ecology and architecture interact in an sustainable and resilient?

SCOPE AND LEARNING OUTCOMES

The aim of this course is to integrate knowledge and skills gained during previous courses and apply these in a sustainable urban development project.

Intended learning outcomes

The Intended Learning Outcomes (ILOs) describe and define what you will need to know in order to pass the course. Your grade(s) is based on our assessment of your performance in relation to the ILOs, specified through the grading criteria. The ILOs are formalized through the course plan established by KTH and are non-negotiable for both teachers and students.

After completing the course, you should be able to:

1. Design and delimit a project work, establish a project plan for this, and continuously report on progress in a structured manner;
2. Identify, select and summarize adequate theory and method for the project work, argue for the selections made, and critically reflect on how these affect the project work results;
3. In relation to the selected study area, carry out a baseline analysis and, based on this, identify strategic sustainability challenges;
4. Develop a proposal for how the identified sustainability challenges can be handled, by what stakeholders, and what effects the proposed intervention would have on different societal groups;
5. Translate the project work results to an implementation plan and/or policy recommendations.

Workload

The course runs halftime, implying around 20 hours of course work per week. The course is scheduled Tuesdays and Fridays.

Central to the course is to independently design and coordinate the project work, to select appropriate theory and method and to identify literature. With its flexibility in terms of focus areas and high demands on independence and scientific quality, the course provide a good preparation for the thesis work.

CONTENT

Three modules

The course comprises three separately graded course modules:

PRO1 – Project work, 10.5 credits, A-F	<i>The project work, in which project coordination and reporting constitutes an important part, alongside carrying out the project per se.</i>	<i>ILO 1-5</i>	Assignment 00, 04 (Assignment 01-02 is a precondition)
SEM1 - Literature seminars, 3.0 credits, A-F	<i>Literature seminars where students themselves identify, select, summarize and discuss relevant literature.</i>	<i>ILO2</i>	Assignment 03
TEN1 - Home exam, 1.5 credits, A-F	<i>A written home exam, focusing on critically reflecting on the project work.</i>	<i>ILO 2,4</i>	Assignment 05

Assignments

The course activities constitute five main assignments that are linked to each other and allow the students to learn about design and research methods by collaborating in small groups.

For Assignments 01-02 groups will be formed across the two courses. Assignment 03 and 05 are individual, whereas for Assignment 04 groups will be formed within courses (if not otherwise requested by students and approved by teachers).

Each assignment will be introduced separately during the semester and needs to be delivered to accomplish the course by the given date. The assignments are building on each other, so constantly engagement and participation in the course is mandatory.

Tutoring is provided at least once per week (see schedule for more details).

Assignment 00a – Reflexive Project Diary

Parallel to the five main assignments each student has to continuously develop a so-called Project Diary Booklet. In this booklet you should document your research findings, decisions, questions and reflections during the course. Relevant decisions, documentation of sketches, notes, research outcomes, sources and development of the design process shall be collected and documented in this booklet. The final hand in of the self-contained booklet will be also at the end of the semester 18.12.2017. Each assignment and event, workshop day, study trip etc. shall be reflected with your own thoughts. We expect approx. 2000 words per reflection.

- Introduction 29.08.2017
- Deadline for submitting diary 18.12.2017

Assignment 00b – Personal Interview

The aim of the personal interview is for the teacher team to get to know more about your pre-knowledge and specific professional experiences. For this meeting please prepare a statement of interest which outlines the skills you wish to develop through this project-based course. Make sure you bring your recent research projects. (if possible printed!)

Questions for the statement of interest:

- What skills and knowledge do you wish to develop during the course?
- Which earlier courses will be important inspiration for you?
- What personal and professional interests will be central during the course?

- What expectations do you have?
- How are you representing yourself in group works?
- Are you the team leader, the 'fairplayer' or rather the executer type?

- The interviews will take place 08.09.2017 (tbc)

Assignment 01 – Historical narratives from Södertälje and its bioregion

Each group select one historical identity and creates a narrative based on actor-network analysis including both a concluding text and maps representing different time frames.

- Introduction 29.08.2017
- Site visit Södertälje 01.09.2017
- Joint tutoring seminar 05.09.2016 (tbc)
- Final seminar 26.09.2017

Assignment 02 – Mapping the present

Within this assignment each group will define critical questions regarding local ecologies and produce a new illustration in the form of a map.

- Introduction 08.09.2016
- Joint tutoring seminar 12.09.2016 (tbc)
- Final seminar 26.09.2016

Assignment 03 – Literature seminar report

With inspiration from the three course seminars the students individually write a report discussing one water challenge that has been highlighted during the seminars and use to the topic relevant scientific literature and other references.

- Introduction 26.09.2017
- Seminars:
 - Oyster seminar 29.09.2017 (tbc)
 - Futures Workshop & Lecture Day 03.10.2017
 - Course literature seminar 10.11.2017
- Final report to be submitted 30.11.2017

Assignment 04 – Developing your proposal

Drafting and developing your proposal, according to course specific requirements.

- Introduction 26.09.2017
- Joint presentations and critique 27.10.2017 (tbc)
- Joint presentations and critique 21.11.2017 (tbc)
- Final presentations and critique 12.12.2017

Assignment 05 – Reflecting home exam

Home exam in which reflection on the project work stand in focus and is discussed in relation to relevant scientific literature.

- Deadline for submitting home exam 12.01.2018

EXAMINATION AND GRADING

The course gives a total of 15.0 credits, and comprises three different course modules. For each of these modules you get a partial grade. The master level of the course means also that the grading will also be judged on a master design level. Individual grading, A-F. The individual input at group work, supervision and presentation is taken into account for individual grading if needed.

- **PRO1 - Project work, 10.5 credits, A-F**
The project work is examined based on the project work report plus the process of carrying out the project work. PRO1 examines all ILOs.
- **SEM1 - Literature seminars, 3.0 credits, A-F**
The literature seminars are examined based on the seminar PMs. It examines part of ILO2 (“Identify, select and summarize adequate theory and method for the project work”).
- **TEN1 - Home exam, 1.5 credits, A-F**
The home exam examines part of ILO 2 (“critically reflect on how these affect the project work results”) and ILO 4.

A= very good, demonstrates big amount of independency and originality

B = very good

C = Good, with some deficiencies

D = Good, but with quite some deficiencies

E = Approved, but with big deficiencies

F (x) = Supplement needed to be approved (A-E)

F = Failed

Equal contribution to project work

Co-operating in projects is sometimes challenging. Group members may have different ambition level, different communication styles, or different expectations on each other, which can create stress or even conflicts. One reason to work in projects is to experience this and to learn how to resolve difficulties in a professional way. The project requirements and supervision are designed in part to help you to plan your project in a way so that problems are avoided. Please contact your group supervisor **at an early stage** if you experience problems of co-operating in your group that you don't know how to resolve yourselves, so that we can find a way to help you.

Plagiarism

KTH takes plagiarism and other forms of cheating very seriously. In the web platform BILDA, all assignments are automatically controlled for plagiarism. Deliberate plagiarism leads to disciplinary measures from KTH, but in most cases it is possible in an early stage just to draw attention to the risk or suspicion of plagiarism.

The following is an informative quote from: Guiding students away from plagiarism, by Jude Carroll and Carl-Mikael Zetterling (available at <http://www.kth.se/vil/learninglab/plagiat>):

“Plagiarism is defined as submitting someone else’s work as your own. A student’s work can be declared to be plagiarism if it shows unacknowledged use of other people’s ideas and materials. Plagiarised student work makes it seem as though the ideas or materials are the student’s own rather than making it clear where in the material the student has included work from others. The same is true if students include others’ words and do not show that they are quoted. There are

well-developed methods for demonstrating that work is derived from others' work or others' words. Acknowledgments may include referencing and citation systems, explicit descriptions of how the work was developed, and academic writing styles which give explicit signals of where ideas, words, images, figures and other such materials are used in the student's own work."

COURSE INFORMATION AND UPDATES - CANVAS

We will be using Canvas as key communication platform during the course.

COURSE REGISTRATION

Please register on-line for the course through My Pages → Courses → Registrations. You will immediately see in your personal menu when you have registered successfully. If you encounter any problems when registering, please contact the education office at KTH.

DISABILITIES (FUNKA)

If you have a disability you may receive support from Funka:

<https://www.kth.se/en/student/studentliv/funktionsnedsattning>

It is also important that you **inform the teacher regarding any need you may have**, and, if necessary provide the certificate you get from KTH Funka coordinators. This must be done in order for us to take into account your specific needs.