



**KTH Architecture and
the Built Environment**

COURSE PM – SUSTAINABLE PLANNING AND DESIGN (AG2805)

Sustainable Planning and Design gives you a comprehensive introduction to urban sustainable development, mainly from a Swedish perspective. The course has a mix of individual and group exercises, a number of deliverables, and runs for eight intense weeks, 24th of August through 18th of October 2012.

The course has five main parts: three different group assignments, one individual essay and individual exams. Through a number of deliverables, we ensure that no one lags behind. The course literature is examined at two occasions, through paragraph and essay questions, and the students participate in the assessment. On the whole, we expect few simple “right-wrong” type answers to questions posed during the course. Instead, the focus is on critical reflection, discussion and the continuous exploration of complex issues.

In the following, the contents and deliverables of the four main parts of the course are introduced, its learning outcomes are given, and the examination forms and the grading system are presented. You will also find a literature list, and information on formalities and practicalities. The schedule is provided in a separate document.

Please remember that the information in this PM might be due to changes. The main means for communication between teachers and students is the KTH computerised information system Bilda. Through Bilda you will get updates, detailed programmes for the course parts, and quick replies to questions.

Course assistant Yevgeniya Arushanyan will happily answer any questions you might have or forward them to the right person. You reach her at [yevgeniya.arushanyan@abe.kth.se].

Credits: 15
Level: Advanced
Grading: A-F
Language: English
Time: August 24th – October 18th, 2012

Teachers:
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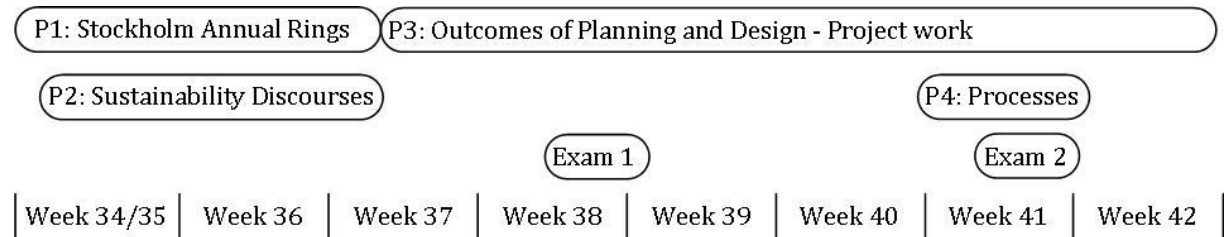
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And other guest lecturers.

COURSE STRUCTURE



Part 1: Pre/post/present Stockholm

Responsible teachers: Patrick Verhoeven and Daniel Koch

Runs weeks 35-37, parallel to Part 2

Groups of 4-6 students, mixed across tracks

Deliverable: A PowerPoint presentation

Individual grading, P/F (pass-fail)

Stockholm is a city marked heavily by a large expansion in the mid-to-late 1900s with subway suburbs being established ever further out from the center, which has been followed by an era of densification in and close to the city center. So is at least the general perception, although it is a story leaving out many variations. Still, the relation central city-suburb is ever-present in discourse and central to much thinking, and the models developed for the "million program" areas in different forms dominate much of the landscape. This perception has been so strong that the second-latest comprehensive plan identified a set number of typologies, distributed into areas, that then were meant to be retained. The new comprehensive plan, however, speaks of a, for Stockholm, in many ways new strategy: instead of working with areas, the focus is on connections - and on connecting these "isolated islands" of the suburbs while densifying the areas closest to the city core. This strategy appears sound on the strategic level, but how does it work in practice, and how do areas respond, resist, transform from such a strategy?

The task is to investigate how the new comprehensive plan relates to the existing urban landscape, and whether deploying its strategy can also lead to improve conditions of sustainability with its many different facets. It is thereby investigating two types of "here": the "here" of the built materiality and lived space, and the "here" of current planning policy and strategy of the municipality, by use of deploying a "then", or the "here" of a possible future. It also addresses the questions of scales of action for sustainability solutions in order to learn more of the Stockholm urban structure.

In a Stockholm context, we define urban sustainable development through the prism of planning and design. We analyse and compare the urban structures and the urban life of areas from different epochs, based on observation, historical documents etc. We relate findings to urban sustainable development. Each group uses a given Stockholm City district to get a first insight into the following questions. Similar ones will then be further explored later on in the course and the programme.

Part 2: The concept of urban sustainable development

Responsible teachers: Josefin Wangel and Feras Hammami

Runs weeks 35-37, parallel to Part 1

Individual reading, reflecting and writing

Deliverable: An individual essay

Individual grading, A-F

What are the challenges of sustainable urban development? And why is sustainability so hard to achieve? In the second part of the course we explore the concept sustainable development, its historical roots and how it is interpreted, enacted and used in contemporary planning and policy practice. Through a discursive approach we open the concept up to explore its plurality and to scrutinize these from a power perspective. In relation to this we also look into the role of the planner and of planning.

Part 3: The outcomes of planning and design

Runs weeks 37-42

Mainly track specific projects

Project work supplemented by lectures, seminars and reading

Groups of 4-6 students

Deliverables: Track specific as described in the following

Grading by groups, A-F

The project is the biggest part of the course. Its focus is on planning's outcomes: plans, designs, programmes and other documents, and on what they convey. For students following the SUPD Master's program the project also function as an introduction to the specialisations of the three tracks. Thus, the three tracks will have somewhat different assignments, further introduced below and in the project part PM:s. We work in projects or studios, supported by lectures, study visits, seminars and reading. Most of the lectures are common but some seminars and readings are track specific. The schedule gives further information about this.

The common starting point for the projects is a twofold challenge. The first challenge concerns the need for housing and other services. We assume that the population of Stockholm has increased substantially and furthermore that new residential buildings and services has been allocated to a number of suburbs. Here we make use of already existing plans and visions according to which Stockholm is to be developed into a multi-nuclear city. Our focal area is two of the so called "strategic nodes": Högdalen and Farsta as well as the area that connects them. The second challenge concern the conditions for the provision of goods and services. Here we assume that oil and other energy sources are much more expensive than today, from which follows that local production of consumer commodities is once again a necessity to be planned for. All of this combines to a situation where business as usual will not suffice but that calls for a locally focused urban sustainable development of Stockholm.

Thus, the project's starting point is questions such as: How could planning and design best address this challenge? What synergies and conflicts arise? What important aspects cannot be addressed?

UPD Track project

Responsible teachers: Patrick Verhoeven and Daniel Koch

The UPD project within the course Sustainable Planning and Design asks its students to consider, from their own professional standpoints, the potential and implications of the above scenario... What could we do *now* to be better prepared? How would we react *then* in order to maintain a quality of life we might all consider “good”? Jumping between the time of the present (2011) and that of the near future (2040), students are asked to formulate strategies, propose design interventions, and develop alternate scenarios which take into account a radical decrease in globalised production and transport practices, and a crisis in non-renewable energies. How might we plan for and design production in a newly *localised* world?

The UPD project has three parts. The initial phase covers the first two weeks and incorporates: site visit, inventory, analysis, methods and toolbox. The second one is the Design phase focusing on a sustainable solution, while the third one is a pragmatic revision.

URP Track project

Responsible teachers: Ebba Högström and Helen Runting

The URP track project requires students to produce a Strategic Policy, which draws upon the wide range of tools available to urban planners in formulating creative policy directions, building a strong evidence base and providing effective implementation strategies. The project takes in a series of separate “exercises” (site mapping & analysis; vision statement; policy structure & policy performance; final critique; presentation poster), which are each introduced, produced and discussed in class with support from teachers in the form of supervised studio work sessions, lectures and workshops.

Students within the URP tracks are to work in groups to produce their policy proposal, and to focus on one of the following areas: labour and housing; goods and services; water, waste and energy; health and well-being; security and risk; food.

They are also specifically targeted to address the overall theme of “Localised Production”, creatively exploring the possibilities, and critically defining the problems faced, in tackling the emergent conditions brought about by the project scenario (the collapse of non-renewal energy resources, long-distance transportation and off-shore labour). Further, they are to take as their site the area of the Högdalen-Farsta nodes, Stockholm, whilst demonstrating an understanding of the relations between the site, neighbouring areas and the broader Stockholm region.

EP Track project

Responsible teachers: Tove Malmqvist and Josefin Wangel

The EP track project requires students to produce an Environmental Plan covering a multitude of sustainability issues and aimed at exploring synergies, conflicts, and strategic decision points. The students are faced with the challenge of turning the Högdalen/Farsta nodes into a sustainable area through localised production of different services of goods. Connected to this the students are asked to identify and elaborate which actors that could get involved or that are crucial to make the changes happen. Furthermore the students are required to assess the potential contribution of their plan to sustainable development.

Part 4: The process of planning and design

Responsible teachers: Josefin Wangel

Runs weeks 41, in part parallel with Part 3

Groups of 8-10 students, mixed across tracks

Deliverables: The staging of a role playing game

Individual grading, P/F

In order to efficiently address urban sustainable development, planners and designers need to involve other actors – politicians, officials, consultants, developers, contractors, organisations, and citizens. In a role playing game based on previous work in the course we display and analyse these actors and their different approaches to urban sustainable development. Assuming that these actors meet for the first time to discuss a project proposal, the group develops a role playing game that illustrates the actors' different interests, conflicts and alliances etc.

Part 5: Exams

The course literature is examined at two occasions, through home exams comprising paragraph and essay questions, and the students participate in the assessment. On the whole, we expect few simple "right-wrong" type answers to questions posed during the course. Instead, the focus is on critical reflection, discussion and the continuous exploration of complex issues. Before each exam there will be a short briefing. The exams are submitted through Bilda.

LITERATURE

Additional literature might be handed out at lectures and seminars.

Main course books:

- Wheeler S M & Beatley T 2009: *The Sustainable Urban Development Reader*. Taylor & Francis Ltd.

You can buy the book at the KTH bookshop (which is located in the Kårhus building). It costs approx. 395 SEK. The book is also available from libraries and internet book stores which might be cheaper.

- Rydin, Y. 2010: *Governing for Sustainable Urban Development*. London: Earthscan. Read Chapters 1, 2 and 8.

The chapters to read in this book will be available in Bilda.

Compulsory further reading (available in Bilda):

Albrechts, L. 2010: More of the same is not enough! How could strategic spatial planning be instrumental in dealing with the challenges ahead? *Environment and Planning B: Planning and Design*, 37: 1115-1127.

Briassoulis, H. 1999: Who plans whose sustainability? Alternative roles for planners; *Journal of Environmental Planning and Management*; 42, 6; ABI/INFORM Global.

Campbell, H. 2006: Is the Issue of Climate Change too Big for Spatial Planning? *Planning Theory & Practice*, 7 (2): 201-230. *Read pages 201-214.*

Carmona, M. 2009: Sustainable urban design: principles to practice; *International Journal of Sustainable Development*, 12, 1, pp 48-77.

Carrhuthers, D. 2001: From Opposition to Orthodoxy: The Remaking of Sustainable Development; In: Dryzek, J.S. & Schlosberg, D., (2005) *Debating the Earth: The Environmental Politics Reader*; New York: Oxford University Press

Connelly, S. 2007: Mapping Sustainable Development as a Contested Concept; *Local Environment*, 12: 3; pp 259-278. *Read pages 259-268.*

Corner, J. 2006: Terra Fluxus; in Waldheim C (ed) *The Landscape Urbanism Reader*; Princeton Architectural Press

Dryzek, J 2005: *The Politics of the Earth: Environmental Discourses*. Oxford University Press; pp 5-20.

Keil, R. 2007: 'Sustaining modernity, modernizing nature: the environmental crisis and the survival of capitalism', in Krueger, Roger & Gibbs, David (eds.) *The Sustainable Development Paradox: urban political economy in the United States and Europe*, The Guilford Press, New York, pp.41-65.

Hajer, M. & Versteeg, W. 2005: A decade of discourse analysis of environmental politics: achievements, challenges, perspectives; *Journal of Environmental Policy & Planning*; 7, 3; pp 175 – 184.

Moberg, Å. & Finnveden, G. 2005: Environmental Systems Analysis Tools – an overview; *Journal of Cleaner Production*; 13, 12; pp 1165-1173.

Svane, Ö. 2008: ...but most buildings are already there. Basic starting points for environmental management in the housing sector; *Columbus F: Housing: Socioeconomic, Availability, and Development Issues*; pp 149-159; Nova Science Publishers, Inc.

Swyngedouw, E. 2007 'Impossible "Sustainability" and the Postpolitical Condition', in Krueger, Roger & Gibbs, David (eds.) *The Sustainable Development Paradox: urban political economy in the United States and Europe*, The Guilford Press, New York, pp.13-40.

VASAB: a website with comprehensive information on the Swedish planning system (<http://www.vasab.leontief.net/countries/sweden.htm>)

Recommended further reading:

Boverket: The National Board of Housing, Building and Planning: <http://www.boverket.se/Om-Boverket/About-Boverket/> with information on Swedish planning. Some publications in English, for example:

Boverket 2004: *The Planning and Building Act. The Act on Technical Requirements for Construction works, etc. The Environmental Code with ordinances of relevance*

Boverket n.y.: *Sustainability by Sweden. Perspectives on urban governance.*

Bulkeley, H. 2006. A Changing Climate for Spatial Planning. *Planning Theory and Practice*. (2006), pp 203-214.

Bithas Kostas P & Christofakis M. 2006. Environmentally Sustainable Cities. Critical Review and Operational Conditions. *Sustainable Development*. 14, 1, pp 177-189.

Hens L & Nath B 2003: *The Johannesburg Conference*. *Environment, Development and Sustainability*, 5: 7-39.

Hopwood B, Mellor M & O'Brien G. 2005. Sustainable Development: Mapping Different Approaches. *Sustainable Development*. 13, (2005), pp 38-52.

Kalbro T & Mattsson H 1995: *The Legal Framework. Urban Land and Property Markets in Sweden*; University College London Press.

Li Y, Yeung C-W & Seabrooke W. 2005. Urban planning and sustainable development under transitional economy: a case study of Guangzhou. *International Journal of Sustainable Development & World Ecology*. 12 (2005), pp 300-313.

Luke T. 2005. Neither sustainable nor development: Reconsidering sustainability in Development. *Sustainable Development*. 13, (2005), pp 228-238.

Nordregio: http://www.blst.dk/NR/rdonlyres/E259C889-F9B7-40D5-A8A7-7E333E28F03E/6998/regional_planning_in20Nordic_UK.pdf

Paliwal P. 2005. Sustainable development and systems thinking: A case study of a heritage city. *International Journal of Sustainable Development & World Ecology*. 12, pp 213-220.

Svane Ö 2008: Situations of Opportunity – Hammarby Sjöstad and Stockholm City's Process of Environmental Management; *Corporate Social Responsibility and Environmental Management*; Vol 15, no 2; John Wiley & Sons Ltd.

Tunström M 2007: The vital city: constructions and meanings in the contemporary Swedish planning discourse; *Town Planning Review*; 78, 6; pp 681-698.

THE FORMALITIES

Course objectives

The formal description of the course defines its learning outcomes as follows. In detailed documents for each part of the course, these outcomes are further elaborated.

The purpose of the course is to explore and understand urban sustainable development in the context of planning and design and to indicate how its practice can be improved.

After completing the course, the student should be able to:

- Summarise, compare and critically discuss definitions of urban sustainable development stemming from policy, planning and science
- Identify and apply planning and design methodologies that contribute to urban sustainable development, including tools for assessment
- Identify main characteristics of Stockholm city districts from different periods and analyse these in relation to urban sustainable development
- Identify and characterise main actors of urban sustainable development
- Creatively explore and critically analyse how planning and design can contribute to urban sustainable development of a city such as Stockholm– in short and long time perspectives
- Identify, critically analyse and indicate ways of resolving tensions related to planning and design for urban sustainable development- between stakeholders, goals or different time perspectives
- Present course proposals and analyses as text, drawings and/or illustrations as well as orally

Credits and grading

The course gives a total of 15 hp, and comprises four different elements of examination¹. For each of these four elements (see below) you get a partial grade. These are then aggregated and weighted into a grade for the entire course. The four examination types, their relation to the five parts of the course, their credits and their scope of partial grades are as follows:

SEM1 (3hp) P/F: This grade is based on Parts 1 and 4

SEM2 (3 hp) A-F: This grade is based on Part 2

PRO1 (6hp) A-F: This grade is based on Part 3

EXA1 (3 hp) A-F: This grade is based on Part 5, i.e. the two written exams

To pass in all parts of the course, you should:

- be present and actively participate in literature seminars,
- be present and actively participate in the preparation and presentation of project and role game,
- be present in at least 75 % of scheduled lectures, and
- be present and actively participate in at least 75 % of supervised group exercises
- pass the two exams

¹ The Swedish university grading system normally has five levels of “pass” (A-E) plus “fail” (F), but one of the partial grades of this course is just “pass-fail” (P-F). Please note that the grades are not relative, nor do they indicate the academic level of the course (Bachelor, Master etc). Instead, they indicate the student’s standard of attainment in relation to the learning outcomes of the course.

Active participation means such as commenting on the work of others and presenting parts of the project. The teachers keep track of this for the individual student also in group work. The teachers also assess how well you can compile, critically assess, develop and go beyond information from books, lectures, fieldwork etc. In the detailed course documents there is information on how grades relate to the learning outcomes of each course part and the total. This enables you to decide what grade to strive for.

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.”

THE PRACTICALITIES

If you have questions or problems, you should always in the first hand contact the course assistant Yevgeniya Arushanyan (yevgeniya.arushanyan@abe.kth.se). E-mail is the quickest and most efficient means of communication. The course assistant will normally upload, download and send messages to you via the computerized communication system BILDA.

The BILDA system

All course information, instructions for assignments etc. is published on the internal web called BILDA, www.bilda.kth.se. There, all registered students (and teachers) can login with the kth.se account that you get from your international administrator at the dean's office. We use Bilda:

- to distribute all course material,
- for information regarding schedule changes etc., and
- for the teachers to publish and the students to submit assignments.

When you login:

- Under *Events*, the courses that you have registered to appear (if they use BILDA). Each course/event has several folders, as follows
- In *Documents*, you find course material for download (General course information, Group divisions, Lectures etc)
- In *Discussion*, you find folders where you upload the course assignments. To upload an assignment, choose the proper Discussion Forum and then "New subject". Name the file starting with your family name, an underscore, your initial, and then the name of the assignment, f.ex. "WANGEL_J_Assignment1".
- *My Documents* is your personal folder, where you can save your own assignments etc.
- Under *Personal*, carefully check that your name and e-mail address is correct. Always use the kth.se e-mail address for communication regarding the course. We would also kindly ask you to put your picture in Bilda. This will help us to identify you (especially in the beginning of the course).

To communicate via Bilda, there are different options:

- PIM: "Instant message", can be viewed only on Bilda.
- E-mail: via the Bilda system. To stay informed, **check the kth.se e-mail regularly!** We will only communicate with you through your **kth.se** e-mail addresses.

There are also chat forum functions, but the teachers do not use them in this course. If you want to use chat for communicating within the student group, you are of course free to do so.

Computer access

To follow the course and use the BILDA system, you need to have daily access to a computer. There are computer rooms in the L and V-building that have Internet and printers.

Literature search

On the web portal <http://www.kb.se/libris/> you can search for books and articles. You can also see at what libraries they are available. You can either go directly to these libraries or order a distance loan (fjärrlån) to KTH Main library, Osquars backe 25.

Study trips

There are two study trips in the course. The first one, on August 29th presents Stockholm's "annual rings", their architecture and planning history. The second one, on September 13th

presents the study area for the track specific projects, part 3 in the course structure. The first one is by bus, and the second trip is by public transport. More information of the trips will be given separately.

Lecturing Rooms

The rooms where **most of** the lectures etc. in the course take place are called SVG and Loftet. They are located in the library, as well as Studio C. SVG = Sydvästra galleriet = "The southwestern gallery", and Loftet = "The loft". You find them at Osquars backe 23, one floor up in the library.

Other classrooms can be located through using the classroom finder available at: <http://www.infra.kth.se/GIS/projects/classroomSearch/>

