

# Resilience thinking in Sustainable Planning

## 7.5 credits

AL2511

29th of August – 28th of October 2022

Canvas will be used for all information during the course so have a look there regularly. If you have questions regarding the course, check Canvas, ask classmates or e-mail Carrie (see below).

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### **Application, admission and registration**

In order to take this course, you need to apply through [www.antagning.se](http://www.antagning.se) and subsequently be admitted by your study counsellor. If you are late with your application to the course, please contact your study counsellor and you will find e-mail addresses here [Study counselling | KTH](#).

In order to partake in classes, get access to our Learning Management System (LMS) Canvas, write the examination and get your grade, you must register to the course. You will find the web registration function via [Ladok for students \(Home page - Register\)](#).

Keep in mind that you must have registered to maintain access to your courses after the web registration period.

If you have previously been registered to the course and need to be re-registered, you must contact the Students Office by using the following e-mail [kursexp@abe.kth.se](mailto:kursexp@abe.kth.se).

The self-registration is open during specific periods in connection with the start of the course, and registration must occur during this period. You can find more details about the self-registration procedure here [Course registration | KTH](#). If, for some reason you were unable to register through your personal menu, please contact our Students Office.

## Messages and ongoing information

Information about the course is mainly published as "*Announcements*" on the web-based Learning Management System (LMS) Canvas.

Remember to edit your settings on Canvas in order to receive notifications straight to your e-mail or cell phone. Otherwise, there is a risk that you will miss important information, such as schedule changes, etc.

Your default e-mail in Canvas is the e-mail connected to your KTH account. To change your e-mail address go to *Account* > *Settings* in Canvas and add the e-mail address where you want the notifications to be sent.

If you want to know immediately when a new announcement has been published, go to "*Account – Settings-Notifications*", and check the bell for "*Notify Immediately*". You can find more details about Canvas under "*Help*".

## Scope and learning objectives

The course addresses different perspectives on social-ecological systems and their resilience, adaptability and transformability. The concepts are discussed in lectures, seminars and during the student's own studies of literature as well as in-group work. We specifically analyze the concepts in relation to sustainable planning.

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

1. Explain and use central concepts in resilience thinking
2. Discuss how these central concepts relate to each other
3. Reflect on and critically discuss resilience thinking in general and in relation to sustainable planning in particular
4. Apply (perform, present and discuss) social-ecological resilience in a planning context and present this application orally and in written
5. Present written work in a scientifically sound way
6. Work in a collaborative project setting

## Learning activities

The course equals 200 hours of work, whereof around a quarter of the course is spent online (synchronous or at own pace) in class. Most of the learning will take place outside the classroom (reading, reflecting, and preparing for seminar, writing the home exam and project group work). The scheduled activities are structured as lectures, literature seminars, field visit and project work in groups including supervision, presentations and evaluations.

*Literature seminars:* The objective with the literature seminars is to gain understanding of the key concepts in resilience thinking, and jointly reflect and critically discuss resilience thinking based on the readings. The objective is also to develop skills in group discussions, peer learning and performing tasks

together. The literature seminars will help you prepare for the home exam and are an opportunity to learn together. The seminars are designed around the learning objectives 1-4. Instructions for each seminar will be uploaded on Canvas.

*Home Exam:* After the first half of the course, you will write an individual home exam covering the central concepts of the course. Your task is to show that you have achieved learning objectives 1-3 and 5. A detailed instruction for the home exam including grading scheme will be posted on Canvas.

*Group project:* During the second half of the course, you will work in groups to perform a resilience assessment that is to be presented as a written report and orally in class. During this project you will apply the theoretical content of the course in real planning cases. This kind of complex system analysis requires inter-disciplinary collaboration, wherefore collaboration skills are emphasised in the course. This activity is related to all learning objectives, but specifically objective 3 and 5.

*Study visit:* A field visit will be organised where different sites, activities, initiatives working with sustainable urban development in the Stockholm region are shown and presented. The aim is to link the theoretical part of resilience thinking to real world cases and is an important preparation for the group project. This learning activity is of importance for learning objectives 3 and 4.

*Use scientific referencing:* When you write (literature assignments, home exam, project report), you are expected to make proper scientific references to the literature and other sources. This is an important skill in the master thesis project and is therefore highlighted during this course by a specific learning objective no 5. For more information on writing, consult the course documents “Tips for Acknowledging Sources” and “Harvard referencing” on Canvas.

## **Grades**

Normally you receive your grade within 15 working days after the written examination. It will be shown at your personal side in Ladok.

## **Grading criteria**

All grades build on each other meaning that you must fulfil the criteria for grade E to achieve grade C and so on.

Learning objectives: After passing the course the student should be able to	Examination	Grades	Grading criteria for grade E	Grading criteria for higher grades
1. explain and use central concepts in resilience thinking	Home exam (TEN) Seminars (SEM)	C-E	Ability to, with own words explain central concepts by i) a correct definition and ii) examples showing how the concepts can be used. Answers all questions in the home exam. Actively participate in all seminar discussions.	C) Ability to motivate central concepts and explain these by using own, relevant examples.
2. discuss how these central concepts relate to each other	Home exam (TEN) Seminars (SEM)	A-C-E	Ability to with own words and by examples describe how the central concepts are related and discuss the importance of some of these relationships. Answers all questions in the home exam. Actively participate in all seminar discussions.	C) Ability to the major part correctly describe a complex social-ecological system based on the relations between central concepts in resilience thinking. --- A) Ability to in a correct way describe a complex adaptive social-ecological system based on the relations between the resilience thinking concepts.  Ability to motivate and discuss how complex social.ecological systems can be related to a sustainability perspective.
3. reflect on and critically discuss resilience thinking in general and in relation to sustainable planning in particular	Home exam (TEN) Seminars (SEM) Project work (PRO)	A-C-E	Ability to with own words describe advantages and drawbacks with resilience thinking in general and from a relevant societal planning example. Answers all questions in the home exam. Actively participate in all seminar discussions. The project hand-in includes a reflection about how the resilience thinking model has been useful in the project.	C) Ability to with own words reason about advantages and disadvantages with resilience thinking in general, and from an own, relevant societal planning example. The project hand-in includes a reflection about how the resilience thinking model is useful in societal planning in general. ----- A) Ability to argue for an own approach in relation to resilience thinking. The project hand-in suggests relevant ways to handle the disadvantages of the resilience thinking model when applied in societal planning generally.

4. apply (perform, present and discuss) social-ecological resilience in a planning context and present this application orally and in written	Seminars (SEM) Project work (PRO)	A-C-E	Ability to from a selected and delimited social-ecological system in a planning context, analyse its resilience.  Ability to discuss the application and results of the analysis and summarise the analysis in a written and oral format that follows the instructions.  Active participation in all seminar discussions.	C) The majority of the considerations in the analysis is motivated.  The hand-in is structured in a logical way and presents the project work in the major part in a correct and relevant way.  The analysis is thoroughly discussed and reflected upon. The oral presentation is communicative. ----- A) All considerations in the analysis are motivated. The hand-in is easy to follow and presents the project work in a correct and attractive way. The oral presentation is well adapted to the target group.
5. present written work in a scientifically sound way	Home exam (TEN)	C-E	The home exam is structured in a logical way and is to the majority written in a scientifically correct way.	C) The home exam is well written, easy to follow and written in a scientifically correct way.
6. work in a collaborative project setting	Project work (PRO)	Pass/Fail (endast E-nivå)	Participation in all parts of the project work and the project is executed in active collaboration within the project group. The project progress and results are presented with joint responsibility among the project group members.	

## Examination

The course is examined in three modules – Seminars (SEM), 2 hp, Home exam (TEN), 3 hp and Project work (PRO), 2,5 hp.

### *Seminars (SEM) – 2 hp, Pass/Fail*

In order to pass you must fulfil the criteria for grade E for learning objectives 1-4. This requires that you have prepared for, and actively participated in, all seminars and during the whole seminar, according to the seminar instructions (posted in Canvas). If you for some reason would miss parts of a seminar or a full seminar you should inform the course assistant beforehand. It is possible to make up for missing part of one seminar, or one full seminar, by preparing for and attending the extra seminar. The assignment for the extra seminar will stand in relation to the amount of time the student has missed in the regular seminars. The workload for the extra seminar will be somewhat more demanding than preparing for and taking part in the regular seminars.

### *Home exam (TEN) – 3 hp, A-F*

In order to pass this module, you must fulfil the criteria for grade E for the learning objectives 1-3 and 5. You are expected to use the course literature and possibly other scientific sources to answer the questions in the home exam. It is allowed to work in pairs or in groups, but each exam should be handed in individually and they will be checked for plagiarism, i.e. it is not allowed to write the same text as any other student. All questions in the home exam must be answered. The module grade is a weighted grade based on assessment of all included learning objectives. A is the highest grade and Fx means that the student did not pass a learning goal. If you receive the grade Fx, you get a chance to raise your grade to an E by submitting a revised version of the home exam and one additional question given to you by the course team after the course. If this is not done successfully, the grade will be F. It is not possible to improve given grades if A-E.

### *Project work (PRO) – 2.5 hp, A-F*

In order to pass this module, you must fulfil the criteria for grade E for learning objectives 3- 6. The group project includes researching your topic, going through the steps in the resilience assessment, participating in tutorial meetings (optional), writing your report, preparing and giving a presentation, evaluating another group's report and presentation, and revising your own report for the final upload on Canvas. The module grade of PRO is a weighted grade of the assessment of all included learning objectives. The general approach is that students in a given group will be given the same grade. A is the highest grade and Fx means that the student did not pass a learning goal. Fx means that it is possible to pass if an extra task is completed successfully. In that case the grade will be E. If this is not done successfully, the grade will be F. It is not possible to improve given grades if A-E.

*The final course grade is calculated as a weighted average of TEN and PRO.*

	Home exam (TEN)				
Project work (PRO)	A	B	C	D	E
A	A	B	B	C	D
B	A	B	C	C	D
C	B	B	C	D	D
D	B	C	C	D	E
E	C	C	D	D	E

The home exam and project work report will be checked for plagiarism by the use of the digital tool URKUND. Plagiarism will be reported to KTH's Disciplinary Committee, which might decide to suspend a student from KTH for a period of 3 weeks to 6 months. To avoid plagiarism, it is very important to use scientific referencing properly. If you have questions about referencing, please ask the course team ahead of submission deadlines. We also have a resource on Canvas under files which can provide guidance.

### **Students with disabilities**

Support via Funka: If you have a disability, you may receive support from Funka. Read more at: <https://www.kth.se/en/student/studentliv/funktionsnedsattning>

Inform the teachers: We also recommend that you as soon as possible inform the course responsible and course assistant regarding any need you may have in relation to a disability. Funka does not automatically inform the teachers.

### **Information about registration and deregistration**

Please register online. Please do not register on the course unless you are fully certain that you want to take it. If you change your mind and want to deregister from the course later, it is very important that you let us know by e-mail and that you deregister online.

### **Administrative questions**

If you have any problems or questions regarding registration on the course, or questions relating to registration of grades after the course, please contact the student administration by e-mail: [kursexp@abe.kth.se](mailto:kursexp@abe.kth.se)

### **Course literature**

A list of the course literature is presented on Canvas.

Welcome to the course!

Rebecka, Carrie, My, Sara, Joseph and Göran