Course-PM, preliminary

HN2024 – Planning and Design of Physical Work Environments 7.5 credits



KTH HT2025

Examiner/Course responsible:

Catherine Trask Phone: 76 704 8635

email: ctrask@kth.se

Course teacher: Jörgen Eklund Phone: 08 790 4866

email: jorekl@kth.se

<u>Education cycle:</u> Second cycle

Main field of study: Technology and Health

Grading scale: A, B, C, D, E, FX, F

Course goal

The overall aim of the course is that students learn to contribute in creating better physical work environments. Through theory and practical training, the student will gain basic knowledge in planning and design processes and its importance for the physical work environment. The course focuses on offices, industries and service facilities such as health care and acquisition of new equipment. The **intended learning outcomes (ILO)** are:

- 1. Describe and discuss design projects, their management, and in which stages and contexts different sub-processes and methods are suitable.
- 2. Describe and discuss the involvement of different stakeholders, their roles and political navigation in the planning process.
- 3. Describe different methods, models and tools for planning.
- 4. Choose and use relevant planning methods and models that are central for the course and reflect on their usefulness and relevance.
- 5. Describe and discuss planning in practice.
- 6. Give proposals of how to design workplaces and equipment in a practical case.

As part of a master thesis program, another aim of the course is that students learn documentation and communication of results of their work in written text and orally as well as being able to review and judge other's work in a structured way.

Course main content

There are different types of learning. The learning deepens when being active. You get better understanding and competence when trying to apply methods compared to only reading about them. This course contains practical activities such as a project work on a real case, performed in groups where collaboration is of importance, as well as lectures, workshop seminars, and examinations. Besides scheduled learning activities, time is addressed for studies by yourself. In order to get as much as possible out of the course, each student has to participate actively and engage before, during and after the scheduled activities. The schedule specifies preparations and follow-ups after course activities. For example it can be reading of course literature, hand-in of a task and/or quiz on Canvas. The course goal is a red thread through the learning activities. During the examinations it is judged whether the student has reached the course aims.

A detailed schedule of activities is published in Canvas separate from the course PM. However, the schedule may change. Visit Canvas for latest version of the schedule.

Topics covered are: design processes, design methods, tools and models, architectural drawings as

documentation, stakeholders, laws and regulations, and case studies.

Course format: online and in-person

This course is offered primarily as an in-person course with lectures and group work delivered at the KTH Flemingsberg campus. There is also an online option for those who cannot come to class because they are in a high-risk infection category or are staying at home because they have been exposed or are feeling ill. In-class and online sessions will be held in tandem at the same time, and students can expect to interact and discuss with fellow students in the same room and online.

In order to participate online at home, you will need a computer capable of running zoom videoconferencing software, fast internet service, a camera and a microphone.

When coming to classes that will have breakout group discussion or project work, we ask that students bring their laptops (KTH wifi is accessible on campus).

We ask that all students bring and use headphones to avoid speaker feedback during class meetings.

Project (PRO1)

Grading scale Pass or Fail, P/F

Seminars (SEM1)

Grading scale: Pass or Fail, P/F

The course contains 3 compulsory seminars.

Exam (TEN1)

Grading scale: A, B, C, D, E, FX, F

The course will finish with an oral exam administered by the instructors. The scheduling for each student will be announced on Canvas and in class; please be available on the scheduled exam day.

If the student receives FX on the exam the student will get the opportunity to write a complementary hand-in on the part where the student has not reach a level for passing the exam. The complementary hand-in can only give the grade E. If the student receives F a new exam is available during the re-exam-period.

Examination

PRO1 - Case Project, 3.0, grading scale: P+, P, F

SEM1 - Seminars, 1.5, grading scale: P, F

TEN1 - Examination, 3.0, grading scale: A, B, C, D, E, FX, F

Grading criteria

The ILOs (Intended learning outcomes) are assessed according to the following matrix:

	ILO					
Item	1	2	3	4	5	6
PRO1				P, F	P, F	P, F
SEM1	P/F	P/F	P/F			
TEN1	A-F	A-F	A-F			

PRO1 – grade **P** when student has:

- actively participated in all parts of the project work (together with other students in the project group)
- participated in the writing and submission of the project report
- participated in the writing and submission of the review of a peer report
- participated in planning and execution of the oral presentation of the project work

Further, in the project report the student has:

- shown an understanding of what literature is relevant for the project work
- structured the project report according to the project report instructions in a sufficient way

SEM1 – grade P when student has:

- prepared the seminars according to given instructions, e.g. preparative readings and eventual submitting of preparation assignment
- actively participated in seminars trough; literature discussions with other course participants, and completion of group assignments during the seminars
- submitted a summarizing and reflective assignments after each seminar

TEN1 measures the progression of the student regarding the ILOs and is assessed by a number of questions that the student answers in the exam. The grading criteria for TEN1 are seen in Appendix A.

Requirements for final grade

Grade P on PRO1 and SEM1.

The final grade A-F is further based on the grade received on TEN1 (see Appendix A), as well as the performance in PRO1 and SEM1.

The course is offered by

CBH/Biomedical Engineering and Health Systems

Plagiarism

Hand-ins should always be written in the student's own words. Where references are acquired or encouraged these shall be give correctly according to the APA (American Psychology Association) reference system. Read more about plagiarism rules at KTH

https://www.kth.se/en/student/studentliv/studentratt/fusk-och-plagiering-1.323885

Course-specific info about generative AI: Allowed throughout the course according to given guidelines

Generative AI tools may be used in all examination and graded assignments as long as the use follows the course guidelines, unless otherwise explicitly stated. You are also advised to follow the course guidelines for non-graded assignments. The guidelines for the use of generative AI are designed to promote learning and the fulfillment of the course learning objectives. In this course, students are expected to demonstrate professional credibility and ethics, which means taking responsibility as the author of risk assessments - it is important for the public and for your clients that you are accountable for true and accurate work.

Guidelines for the use of generative AI

Generative AI may be used in the course's examination and graded assignments as long as you use it in a manner that is:

- responsible
- ethical
- academically honest

For more details on the ethics of generative AI, please see the <u>Student course on generative AI</u>. One example on how to fulfill these guidelines is to be transparent with your use of generative AI, which means that your use must be disclosed. You will find more course-specific examples under the heading "Examples of permitted use". Note that the guidelines must be followed for examination and graded assignments, but you are advised to also follow them outside of examinations and for non-graded assignments.

Examples of permitted use

Below are examples of permitted use of generative AI in the course. Consult your teacher if you are considering other areas of use.

- **Text editing and translation**: we encourage you to use generative AI to improve the quality of your writing, correct errors, and increase readability. It is good to get practice using tools in this way, since you will likely use tools like this in your professional life.
 - Restrictions: You may only translate sentences or words, not entire paragraphs. You must work further
 with the idea suggestions, you cannot use the generated answer directly.
- **Coaching:** Ask an AI tool to generate exam questions for you to study, or ask it to give a summary of writing errors you make and should work on.
- Idea generation: Use AI to get inspiration, structure thoughts or formulate questions to research further. However, it is always good to think independently first, so that the AI tool does not limit your perspective Note! Remember to critically review material created by generative AI. You as a student are fully responsible for all material you submit and must be able to defend and explain it completely without support from generative AI.

Examples of prohibited use

Below is a description of the use of generative AI in examination and graded assignments that is considered unauthorized assistance, attempted deception or cheating. This is **not** a complete list, always consult your teacher if you are unsure whether your use is permitted.

- Complete assignment solution: AI may not be used to generate entire assignments, reports, or other text.
- **Translation without review:** it is not acceptable to enter translated text into a report without first reviewing it to ensure its correctness.

Disclosure of AI use

To ensure academic transparency, you must disclose whether and how generative AI has been used in your work. Please include the following disclosure statement at the end of your submitted assignments. Even if you have not used AI tools, you still need to include it, but can simply state in the table that no tools were used. To better understand which tools involve generative AI, please see the Student course on generative AI. If you are in doubt whether an app involves AI, it is best to disclose its use and how you used it.

Example Disclosure of generative AI tools used in this assignment

Tool name:	Purpose and Contribution:
(for example ChatGPT, Canva, Grammarly)	(e.g., brainstorming, drafting, data analysis, generated initial draft, provided data insights). e.g. This methods text has been formatted using AI tool "x" with the following prompt:
(Add more lines as necessary for additional tools used.)	

I hereby declare that the above information is accurate and that I have disclosed all AI-generated content that directly influenced or contributed to this academic work. I understand that failure to disclose AI tool usage accurately may be considered a violation of academic integrity policies. This assignment submission represents my own original work.

Student signature

Disciplinary action for unauthorized use of AI

Everything you submit must be your own work — even if generative AI is used as support, the thinking and conclusions must be your own. You must therefore understand the rationale and logic behind the text, and must be able to both answer questions about it or write an outline of it if asked to do so. Using generative AI in an unauthorized way for examination and graded assignments is considered an attempt to mislead and **may lead to disciplinary action**. Therefore, be sure to follow the information on this page, and disclose your use of generative AI.

Questions or concerns?

Contact the course responsible for guidance and clarification of this information, or if you are wrongly accused of unauthorized use of generative AI in the course's examination and graded assignments.

Appendix A. Grading criteria for TEN1

ECTS	Qualitative description of grading criteria		
Grading Scale			
Α	Excellent – extraordinary results with just minor shortcomings. High knowledge level.		
	Good analytic ability. Can use the intended knowledge and skills in the learning outcomes independently		
В	Very good – over average but with some shortcomings.		
	Good overview of the field. Can use the intended knowledge in the learning outcomes independently.		
С	Good – over average but with some obvious shortcomings.		
	Can present the most important parts in the field. Can to some extent use the intended knowledge in the learning outcomes.		
D	Satisfactory – fairly good but with considerable shortcomings.		
	Lack of overall view of the most important parts in the field. Cannot use the intended knowledge in the learning outcomes independently.		
E	Sufficient – the results complies with minimal criteria but not more.		
	Cannot use the intended knowledge in the learning outcomes independently.		
F	Insufficient – considerably more work is needed.		
	A lack of both an overall view and detailed knowledge in the field comprised by the intended learning outcomes		