



Lecture 0: Course introduction and practicalities



The aim of the course is to give students a basic proficiency in production economic thinking, argumentation and analysis. Upon completing the course, the student masters the basic concepts and key dynamics of production as an economic activity, and is through these able to understand and evaluate business-opportunities, design and evaluate business-processes, and analyze the financial state of a business. Further, throughout the course, the student learns basic skills of engineering work, such as project planning, organizing and management.

TU-A1300 Introduction to Industrial Engineering and Management

Introduction Mikael Öhman 1.9.2020

Course staff

Lecturers

Mikko Jääskeläinen

Petri Parvinen

Tuukka Kostamo

Lauri Saarinen

Riikka Kaipia

Karlos Artto

Jouko Karjalainen

Head teachers

Mikael Öhman

Paul Lillrank

Head assistant

Kiri Huhtanen

Assistants

Sergey Zakuraev

Huong Do

Quan Nguyen

Contact:

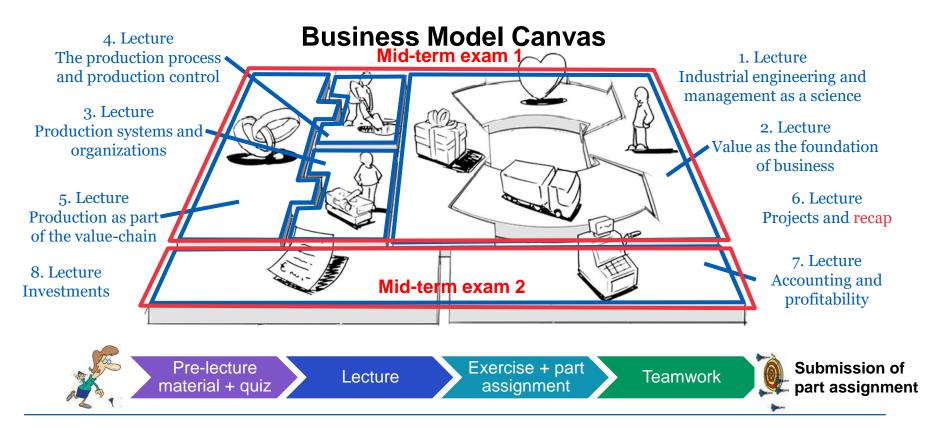
tu-a1300@aalto.fi



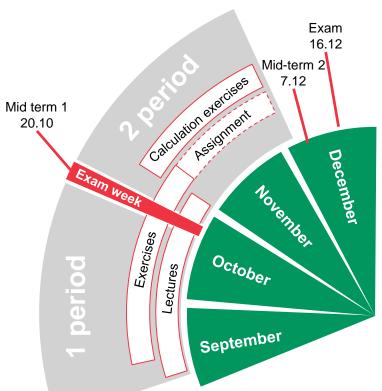
Who have we designed this course for?

- You are likely to be a freshman.
 - ➤ We try to spread out the course workload through several milestones.
- There are different types of learners among you.
 - ➤ The contents of the course complement each other lectures, course assignment, literature.
- For many of you this is the this is the only course in industrial engineering and management.
 - We focus on "key concepts and big dynamics".

Course structure



Course schedule and workload



Course content	Workloa	ad		I perio	d	II perio	od
Lecture	16	h	\rightarrow	12	h	4	h
Preparation for lectures	7	h	\rightarrow	5,5	h	1,5	h
Guided exercise	7	h	\rightarrow	5,5	h	1,5	h
Course assignment	30	h	\rightarrow	20	h	10	h
Calculation exercises	28	h	\rightarrow	0	h	28	h
Self-studies	40	h	\rightarrow	20	h	20	h
Mid-term exams	6	h	\rightarrow	3	h	3	h
Total	134	h		67	h	67	h



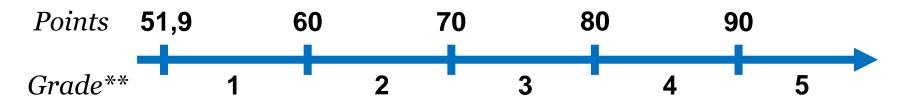
Course evaluation

Exam

50%
Course assignment
30%

Evaluated components	Required to pass	Maximum points	Multiplier
Course assignment pts. (H)	12,0 p.	26,0 p.	1,2
Calculation exercise pts. (N)	40,0 p.	60,0 p.	0,3
Mid-term* / Exam pts. (T)	15,0 p.	30,0 p.	1,7
Pre-lecture assignments (L)	-	3,0 p.	1,0
Course feedback (P)	-	1,0 p.	1,0

Online exercises 20%



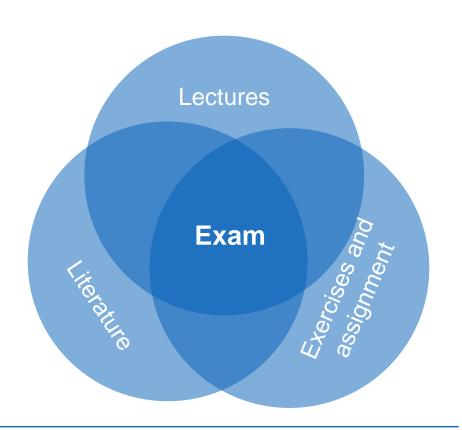


^{*} In each mid-term 7,5p is required to pass

^{**} *If* $H \ge 12$, $N \ge 40$ and $T \ge 15$

Course materials

- Pre-lecture materials, lecture slides, exercise slides.
- TUTAwiki
- There is no course book, we do however recommend a number books
- More info about this on MyCourses



Course assignment

Make a business plan on starting a restaurant in Otaniemi.



- Corona poses an extra challenge this year, but people still need to eat every day @
- You can also do the assignment on your own subject if...
 - ... you succeed on forming a group around the subject.
 - ... you provide a 1-2 page motivation letter to your group assistant before the first exercise, in which you explain (1) why you want to do the exercise on the subject you suggest, and (2) what sources of information you are going to use to understand the product/service you would produce, market and customer characteristics, the production process, supply chain etc.
 - ... the course assistant accepts your subject.



Forming the exercise groups

- You are responsible for forming groups of 4 students
 - Form a group with your friends, or a course participant you don't know. Everyone will have a group by the 14th of September.
- The group assignment runs throughout the autumn term
 - The instructions for each part assignment is published together with respective exercise lecture
 - The group has a dedicated assistant who provides support, help and feedback
 - > Once the exercises are finished, the part assignments are compiled and refined into a course project report
- Once you've found your group, every group member enrolls to the same group in MyCourses
 - You can find the enrollment under "Exercise groups"
- If you can't find a group, or if your group does not have 4 members
 - > Try (harder) to find a group/member!
 - ➤ If this fails, there are instruction in MyCourses on how to proceed
- The group enrollment opens on the 7th and closes by the 14th of September (23:59) Don't leave this until the last minute!



The effects of Corona, autumn 2020

Pre-lecture assignments

No effect

Lectures

Lectures will be held according to the planned schedule, with students attending live through Zoom (Links to them will be published in MyCourses). In case of deviations, a separate notice will be sent to students. The lecture live-stream will be recorded and published in MyCourses after the lecture.

Exercises

The practical example presented by the assistant will be pre-recorded and published in MyCourses. We will try to arrange a possibility for assistant-led contact teaching related to the course project.

Course project

> The course project still relies on student teamwork. We will strive to make sure that all students have access to tools needed for online collaboration.

Online exercises

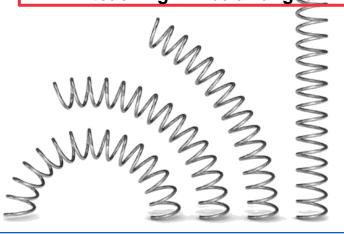
No effect

Exam

The exam and mid-term exams will be arranged as home-exams, to be performed in MyCourses. Förhandsuppgifter till föreläsningarna

In an attempt to be flexible and agile with course arrangements

We will strive to inform you each week on how next week's teaching will be arranged





Welcome to the course!

tu-a1300@aalto.fi