



# MJ2499 Technological Entrepreneurship , Business Plans and Communication 6.0 credits

Tekniskt entreprenörskap, affärsplaner och kommunikation

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for MJ2499 valid from Autumn 2015

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Mechanical Engineering

## Specific prerequisites

BSc or equivalent

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

At the end of the course the student will be able:

To communicate effectively: demonstrate understanding of features of technical and business communication, common genres and common informational formats (such as problem-solution or advantage-disadvantage)

To exploit awareness of purpose, context, content and form to support the notion of oral and written technical communication as a form of cooperation between speaker and listener;

To apply awareness of audience, purpose, organizational strategy and register to deliver a well-crafted oral presentation and to write technical documents (i.e. memos and reports);

To communicate for persuasive purposes: selling a business (elevator pitch) and use the language of debates and discussions: agreeing- disagreeing and negotiating

To manage effectively in the job-searching process: CV writing and job interviews.

To demonstrate a good knowledge and understanding on fundamentals of innovation, business and entrepreneurship.

To use the tools of analysis that are used in the entrepreneurship world

To apply them to the different steps of the entrepreneurship process.

## Course contents

Communication:

- Module 1. Technical & business communication: Featuring technical communication: audience, purpose, tone and style. Technical register and common genres. Grammatical accuracy.
- Module 2. Short oral presentations on technical topics: informational formats (product description; process description; problem-solution); planning and delivery.
- Module 3. Persuasive communication: Job-searching activities and elevator pitch.
- Module 4. Debates and discussions: the language of agreeing-disagreeing.

Entrepreneurship:

- Innovation models: The need of innovation. The innovation process. Tools of generation of ideas. Characteristics of the innovation when high technology is involved. Value analysis. R&D environment.
- Business models of technology based companies: The concept of business model. Business models: ecommerce, mcommerce, b2b, peer to peer, markets, and so on. The concept and the process of monetarization. Examples and cases.

- Customer development. Lean start-up concepts: New products development and new companies creation as a business process. From product development to customer development. Validated customer development. Minimum Viable Product. Measuring the obtained results. Pivoting.
- Canvas analysis: Concept and detailed description: Stakeholder Segments, Value Propositions, Channels, Stakeholder Relationships, Funding, Key Resources, Key Activities, Key Partners, Cost Structure.
- Process analysis: What a process is. Principal processes. Critical processes. Select the main processes of an activity. Process maps. Include data in the process maps. Obtain the capacity needs from this analysis.
- Sales for technology based start-ups: Sales and marketing at the first phases of a company. Different strategies. The management of sales: leads, scores and CRM. Alliances. Sales analysis and forecasting.

## Course literature

- ALLEY, M. (2003). The craft of scientific presentations. Springer.
- BOMBARDO, C., M. AGUILAR, & C. BARAHONA (2008). Technical Writing. A guide to effective writing. Edicions UPC. Barcelona.
- HUCKIN, Th. & L. OLSEN (1991). Technical and professional communication for nonnative speakers of English. McGraw-Hill.
- LANNON, J. (2000). Technical Communication. Longman: New York
- OBER, S. Fundamentals of Contemporary Business Communication. Cengage Learning.
- REINHART, S. (2002). Giving academic presentations. The University of Michigan Press: Ann Arbor.
- SWALES, J. & Ch. FEAK (2009). Academic Writing for graduate students. Univ. of Michigan Press: Ann Arbor
- Ries, Eric. The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Random House LLC, 2011
- Osterwalder, Alexander, and Yves Pigneur. Business Model Generation: A Handbook For Visionaries, Game Changers, And Challengers. John Wiley & Sons, 2010
- Maurya, Ash. Running Lean: Iterate from Plan A to a Plan That Works. O'Reilly Media, Inc., 2012. <http://e145.stanford.edu/syllabus>
- Slides, handouts and other materials posted on the digital campus.

## Examination

- ORA2 - Oral Presentation of Business Plans Module, 1.5 credits, grading scale: A, B, C, D, E, FX, F

- ÖVN1 - Exercise, 0.8 credits, grading scale: A, B, C, D, E, FX, F
- REP1 - Written Business Reports, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Exam, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- ORA1 - Oral Presentation of Communication Module, 0.7 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.