GM0434   Global Technology Management, 7.5 credits
Teknologihantering på global nivå, 7,5 högskolepoäng
Second Cycle

Confirmation

This course syllabus was confirmed by Graduate School on 2020-04-29 and was last revised on 2023-04-21 to be valid from 2023-08-28, autumn semester of 2023.

Field of education: Social Sciences 100%
Department: Graduate School

Position in the educational system

Main field of studies	*Specialization*
Innovation and Industrial Management	A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

To be eligible for the course Global Technology Management the participant must fulfil the entrance qualifications for the Master of Science programme in Innovation and Industrial Management. For programme specific entrance requirements, see programme syllabus.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

1. define and describe a set of key concepts, frameworks and methods relevant to global technology management

2. understand the roles of different key stakeholders in global technology management from a systemic perspective

3. contrast the advantages and disadvantages of different approaches to global technology management

Competence and skills

4. apply and evaluate a set of tools and indicators to determine technology-based business strategy within a specifically chosen industry

5. show understanding for and account for different types of intellectual property-based strategy with a focus on technology, products and services

Judgement and approach

6. express, justify and criticize different arguments for the potential and feasibility of various strategic decisions in global technology management

7. select, motivate, and critically analyze a set of tools and indicators that represent trends and development on the firm as well as industry level.

Course content

Global technology management can be seen as a holistic concept that covers all aspects of the role of technology in the modern global society. It broadly focuses on how this role has shifted, and been applied by different types of actors; for instance, businesses, governmental institutions, and other organizations. More specifically, the course provides an understanding for the role of technology in business, and critically analyzes how technological change through capture, development, integration and even divestment can be used to raise performance.

Most competitive actors involved in producing new goods and services for sale are heavily reliant on technological change and the management of technology. This management, if effective, needs to be integrated with business strategy, in order to generate sustainable competitive advantage. This is true for both new and established firms. This process is extrapolated by the ever-changing globalization occurring in the world economy on different levels. These complex matters are dealt with within the context of external and internal constraints and the realities of product and technology life-cycles.

Examples of topics to be covered include internationalization and outsourcing of technology, research, and development; the respective importance and changing roles of different countries and regions in the global technology landscape; how external knowledge sourcing and innovation affect a global strategy, and global value and supply chains. Topics thus address the sourcing of knowledge and technology and the creation of value internationally. Additionally the course deals with aspects of digitalization and its varied but increasing importance in industrial management.

Form of teaching

Teaching is based on lectures and project-based activities, and project work. The lectures aim to introduce the course participants to various concepts and guide the students through the most important aspects. The individual assignment develops the student's ability to apply and reflect upon the theoretical concepts to existing firms and industries, as well as develop their own analytical and problemitization skills.

Language of instruction: English

Assessment

Learning outcomes 1-3 as well as 6 and 7 are assessed through a written assignment and an exam.

Learning outcome 4 and 5 is assessed through a written assignment.

The written assignment and exam shall be written individually, cooperation in formulating text, tables, figures etc. is not allowed.

A failed assignment can be supplemented to a Pass grade.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed.

The number of examinations is limited to five.

Grades

The grading scale comprises: Excellent (A), Very good (B), Good (C), Satisfactory (D), Sufficient (E) and Fail (F).

Pass is required on all examination forms. The grade corresponds to the total score a

student obtains on the written assignment and written exam. To receive a pass grade (A-E) >= 50% of possible points achieved is required. The scale is tied to fixed score intervals:

A: 85%-100%

B: 75%-84%

C: 68%-74%

D: 60%-67%

E: 50%-59%

F: <50%

Course evaluation

The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course. The course will be evaluated upon completion.