

## **COURSE PM**

# TEK300 ADVANCED INTELLECTUAL CAPITAL MANAGEMENT THEORY

7,5 higher education credits

Karl Maack, Course Manager



1

#### Formal information

Course code & Title	TEK300 Advanced Intellectual Capital Management Theory
Main field of studies	Entrepreneurship and Business Design
Examiners	Professor Ulf Petrusson
Course Manager	Karl Maack (karl.maack@gu.se)
Course administrator	Jenny Taghvai (jenny.taghvai@chalmers.se)

## **Purpose**

The purpose of the course is to provide students with (1) an advanced theoretical foundation regarding the transformation from an industrial to a knowledge-based economy, in particular, the role of knowledge assets and processes in the development of innovations, the organizational structure and strategies of firms, the construction of markets, and the determination of economic policy to support the growth of wealth and welfare and (2) an actionable knowledge of business/law research methods. The theoretical frameworks will be discussed from an inter-disciplinary perspective including the areas of sociology, technology, economics, management, and law.

In the course, the student will analyze, discuss and apply relevant theories to innovation, entrepreneurship and the management of intellectual assets. The student will analyze and apply qualitative, quantitative and other relevant scientific methods.

The course content is packaged and executed into two theoretical streams: Theory for scientific work and Theory for applied projects. The former provides the students with necessary theoretical competences when performing scientific thesis work. The latter provides the students with necessary theoretical competences when working with different types of applied projects in so called incubations; i.e. Healthcare incubation – to transform healthcare needs into viable solutions (Theory of Design thinking and institutional design), Research incubation – to transform research into innovations (Theory of Management of Intellectual Assets for academic environments), Venture incubation – to transform innovation into growth firms (Theory of Management of Intellectual Assets for firms), and Difference incubation – to make a difference in society (Theory of Difference Incubation).

## **Organization**

The course is a part of the Master's Programme Business Creation and Entrepreneurship in Biomedicine and is provided during the third semester. The course team consists of staff from Chalmers School of Entrepreneurship and is managed in collaboration with Sahlgrenska School of Innovation and Entrepreneurship. Sahlgrenska students participating in project work are studying on the Sahlgrenska course MED977, and have their own examination according to the grading system at University of Gothenburg, which is described in their Course Guide.



## **Learning outcomes**

#	After completing the course the students will be able to	Туре
1	Demonstrate theoretical understanding of the epistemological and ontological differences between objective and subjective methods and objects in the social construction of reality	Knowledge and understanding
2	Demonstrate theoretical understanding of the social construction of (1) assets, property, and capital and (2) innovations, markets, and firms and the relevance for innovation and entrepreneurship in the knowledge economy	Knowledge and understanding
3	Demonstrate theoretical understanding of business/legal research methods	Knowledge and understanding
4	Apply advanced theoretical frameworks in relation to knowledge based business and economic development.	Skills and Abilities
5	Apply theory and methodology to the design and implementation of inter- disciplinary social science research	Skills and Abilities
6	Explain the major characteristics that differentiate an industrial from a post-industrial economic paradigm on the level of the firm and society	Judgment and Approach

#### **Examination**

The students are examined through an assessment portfolio consisting of an individual written assignment, as well as a written group assignment which is also presented orally. In addition, the student must participate in mandatory parts in the form of 5 seminars. Absence from a mandatory part can be compensated by an alternative task according to instructions from the course manager.

A student has the right to request a change of examiner if failed twice on the same exam, if this is practically possible. Such a request should be put forward in writing and addressed to the department.

individual written assignment	60%
written group assignment	40%
participate in 5 seminars	P/F

#### **Seminars**

The seminars are given by individuals from Chalmers University of Technology, University of Gothenburg, and guest lecturers with theoretical knowledge and practical experience within knowledge-based business and economic development. Theories and methods for understanding and investigating knowledge-based business are the focus of the seminars.



Attendance at the seminars is mandatory, as most of the lectures will cover material that is not found in the course literature and will be needed to accomplish the assignments. Active participation by the students is critical to the learning experience.

Mandatory seminars	Date
Methodology Seminar 1	September 23rd
Methodology Seminar 2	October 28th
Methodology Seminar 3	November 18th
Methodology Seminar 4	November 25th
Methodology Seminar 5	December 2nd

#### **Group Method project**

The research project will be conducted in groups and consist of two parts:

- 1. Group participation in 5 research methodology seminars
- 2. Group hand-in

#### Individual Assignment

The individual assignment will consist of several essays questions based on the literature and the seminars. The students will have approximately one week to complete the assignment.

#### Grades

The grading scale comprises: 5, 4, 3, Fail. The grading scale for the course is as follows:

$$0-39\% = Fail; 40-59\% = 3; 60-79\% = 4; 80\% > = 5$$

To receive a grade, the student must pass all the examination parts of the course.

## Changes made since the last occasion

The major change since last time is the adaption towards a more online educational setting due to the restrictions put forth by the consequences of the current pandemic.

#### Literature

- 1. Bell, D. (1976) The Coming of Post-Industrial Society. Basic Books.
- 2. Drucker, P. (1993) The Post-Capitalist Society. Harper Business.
- 3. Bryman, A. & Bell, E. (2011) Business Research Methods. Oxford university Press



- 4. Searle, J. (1995) The Construction of Social Reality. The Free Press. (ISBN: 9780684831794)
- 5. Foray, D. (2006) Economics of Knowledge. MIT Press. (ISBN: 9780262562232)
- 6. Spender, JC. (1996) Making knowledge the Basis of Dynamic Theory of Firm. Strategic Management Journal, 17: 45–62.
- 7. Grant, R. (1996) Towards a Knowledge-Based Theory of the Firm. Strategic Management Journal, 17: 109–122.
- 8. Arora, A., Fosfuri, A. & Gambardella, A. (2001) Markets for Technology and Their Implications for Corporate Strategy. Ind Corp Change 2001; 10 (2): 419-451
- 9. Vargo, S. L. & Lusch, R. F. (2004) Evolving to a New Dominant Logic for Marketing. Journal of Marketing: January 2004, Vol. 68, No. 1, pp. 1-17.
- 10. Schumpeter, J. (1962) Capitalism, Socialism, and Democracy
- 11. Lundquist, M. & Petrusson, U. (2002) Designing the role of the entrepreneur using a norm constructionist approach at the interface of research, learning and innovation. (Conference paper from The Triple-Helix conference, Copenhagen, Nov 6-9 2002).
- 12. Petrusson, U. (2004) Intellectual property & entrepreneurship: creating wealth in an intellectual value chain. Göteborg: Chalmers University of Technology. (ISBN: 9197543101).
- 13. Petrusson, U. et al. (2018) INNOVATIONSVERKSAMHET SOM RÄTTSLIGA HANDLINGSSYSTEM NÅGRA RÄTTSTEORETISKA STÄLLNINGSTAGANDEN
- 14. Petrusson, U. (2016) Research and Utilization. Title of Swedish first edition: "Forskning och Nytta" (Tre Böcker Förlag AB, Göteborg, Sweden, 2015). ebook at cip.gu.se.

#### **Schedule**

The schedule is outlined in a separate appendix and covers both the activities in this course as well as the activities in the parallel Applied course (TEK296/MED999). The schedule is communicated to the students via email as well as uploaded to Canvas. Any updates are communicated both via email and Canvas.

## **Faculty**

UP	Ulf Petrusson	SSIE, GU
ME	Magnus Eriksson	SSIE, GU
BH	Bowman Heiden	SSIE, GU
CH	Christoffer Hermansson	SSIE, GU
HR	Henric Rhedin	SSIE, GU
KM	Karl Maack	SSIE, GU
ML	Mats Lundqvist	CSE, CTH
MW	Mattias Wennergren	VGR



#### **Course evaluation**

The course will be evaluated upon completion. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.

Course evaluation is done in writing with a questionnaire. The course manager compiles the result of the course evaluation and gives suggestions for the development of the course. Analysis and suggestions are fed back to the students.

### **Contact**

Contact the course manager at karl.maack@gu.se.

