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Innovation Management II

(GMT6091)

Syllabus

Winter Term 2019/2020

Begin:	Course starts on Friday, November 22 nd , 2019
Room:	see semester schedule
ECTS-Credits:	5
Level:	Advanced Level II
Prerequisites:	Determinants of Innovation Performance
Accessibility:	Course is compulsory for 3rd semester MBA-IM students

Learning Objectives:

By the end of the course, the participants shall be capable to:

- understand the interdisciplinary approach of product development as a blend of marketing, design, and manufacturing incl. the basics of "Design Thinking"
- accelerate the product development time
- improve the design of their products to international standards and

reduce the risks for the market launch

Course contributions to the MBA program goals / learning outcomes

Goal	Course Contributions to Goal	Assessment
1. Responsible leadership in organizational contexts		
2. Creative problem solving skills in a complex business environment	Discovery and analysis of innovation potential, development of innovative concepts	Participation in class, Presentation, Case Studies
3. Research Skills		
4. Management of Innovation	Ability to develop innovative strategies, create an innovation climate in organizations, detect and analyze innovation potential	Participation in class, Presentation, Case Studies
5. Management of the challenges of global sustainability and awareness for social and corporate responsibilities		

Main course topics:

- Design Thinking (Basics)
- Importance of Product Development
 - Scope of Development Efforts
 - Role of Structured Methods
 - Benefits of Integration
- Development Processes and Organizations
- Product Planning
 - Product development opportunities
 - Market competition
 - Technology
 - Portfolio planning
- Identifying Customer Needs
 - Introduction to Concept Development Phase and to Customer Needs
 - Benefits of Structured Methods
 - Review of Customer Needs Method
 - Discussion of Principles and Caveats
- Product Specifications
 - Translation of need expressed in language of customers to a measurable attribute
- Concept Generation, Selection & Testing
- Product Architecture
- Industrial Design
- Design for Manufacturing
 - Introduction to or Summary of DFM
 - DFM Principles and Caveats
- Prototyping
- Robust Design
- Patents and Intellectual Property
- Managing Projects

Basic outline and organization:

Between Nov. 22nd 2019 and Dec. 21st 2019, the MBA students are welcome to attend the lectures in the above-mentioned subject.

In the lectures, there will be a balance between theory and practice through the emphasis on methods which represent a step-by-step procedure for the completion of tasks. In-class exercises, discussions, case studies and presentations will give the students the opportunity to demonstrate their capability of a) analytical competence and problem solving skills b) team work c) creativity and identification of innovation potential incl. problem solving.

Grading:

The grading is based upon the quality of the in-class exercises (25%), presentations (40%) as well as your active participation (35%).

Course Materials (latest editions):

1. Ulrich, K.T.: Eppinger, S.D.: Product Design and Development, New York.
2. Roberts, E.B.: Innovation Driving Product, Process and Market Change, MIT Sloan, Cambridge.
3. Juergens, U.: New Product Development and Production Networks, Berlin.
4. Gessinger, G.H., Materials and Innovative Product Development: From Concept to Market, Oxford
5. Cross, N., Design Thinking, Oxford

Availability of the lecturer and teaching philosophy:

Dr. Frank J. Maile

Office: -

Office hours: -

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I care about your learning, therefore, do not hesitate to contact me by e-mail.

Preliminary schedule for **GMT 6091 – Innovation Management II**

Friday, Nov 22 nd 2019 09:00 – 12:00 14:00 - 17:00 Saturday, Nov 23 rd 2019 09:00 – 13:00	Introduction Importance of Product Development Development Processes and Organizations Product Planning Excursion Identifying Customer Needs Product Specifications Introduction to Concept Generation Concept Selection & Testing
Friday, Dec 6 th 2019 13:45 – 18:45 Saturday, Dec 7 st 2019 09:00 – 16:00	Product Architecture Industrial Design Design for Manufacturing Guest Lecture Branding & Trademarks Patents & Intellectual Property Prototyping Robust Design
Friday, Dec 20 th 2019 13:45 - 18:45 Saturday, Dec 21 st 2019 09:00 - 16:00	Design Thinking: Basics & Case Study Student Presentations