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HS PF

Innovation Management II
(GMT6091)
Syllabus
Winter Term 2022/2023

Begin:	Course starts on Friday, November 4th, 2022
Room:	See LSF and MBA 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 & Methodology
- Agility: Basics & Methodology
- Importance of Product Development
    - Scope of Development Efforts
    - Role of Structured Methods
    - Benefits of Integration
- Development Processes and Organisations
- 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
- Prototyping
- Robust Design
- Patents and Intellectual Property
- Managing Projects

Basic outline and organisation:

Between Nov. 4th 2022 and Jan. 14th 2023, 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 in-class participation & exercises (20%), presentations (40%) as well as the oral exam (40%).

Course Materials:

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

6. Tidd, J., Bessant J., Pavitt K., Managing Innovation, J. Wiley

7. Trott, P., Innovation Management and New Product Development, Pearson

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 4th 2022 13:45 – 18:45	Introduction to Innovation Management, Product Development & Design Importance of Product Development Development Processes and Organisations Product Planning Guest Talk
Saturday, Nov 5th 2021 09:00 – 16:00	Identifying Customer Needs Product Specifications Introduction to Concept Generation Concept Selection & Testing Product Architecture Industrial Design
Friday, Dec 9th 2022 13:45 – 18:45	Excursion (final confirmation & details to follow) Guest Talk
Saturday, Dec 10th 2022 09:00 – 16:00	Design Thinking Branding & Trademarks Patents & Intellectual Property Prototyping Robust Design
Friday, Jan 13th 2023 13:45 - 18:45	Oral Exams
Saturday, Jan 14th 2023 09:00 - 16:00	Product Development Case Study Student Presentations