Faculty of Economic Sciences

Course title: TECHNOLOGY AND INNOVATION MANAGEMENT

ECTS: 6

Course form: Lectures: 30 hrs.

Level: undergraduate, graduate

Prerequisite: non

Semester: winter, spring

Lecturer: Mariusz Maciejczak, Ph.D., <u>www.maciejczak.pl</u> **Teacher's e-mail address:** mariusz_maciejczak@sggw.pl

Teacher's office: building:7, room: 13, phone: 22 / 59 34 235

Description:

Technology and innovation management constitute a discipline of management that continues to gain importance, impact, and attention. As technology is a pervasive force in business and in society, management of technology helps to ensure that the development of new technology and its applications are aimed at useful purposes, and that the benefits of new technology outweigh the disruptions and difficulties that accompany innovation. While it is possible to specialize in technology management, this discipline also constitutes a set of skills that all managers should possess in the modern technology-intensive and technology-driven world of business.

The course is designed as a holistic management approach to achieve high performance through agility and innovation. Course participants will learn how to approach technology and innovation management initiatives in real organization and how to implement the best practices in a company. They will have a clear understanding which approaches, methods and software tools can be use. Whether in small discussion groups or in class, always an active involvement will be demanded from students, allowing them to learn not only from the lectures, but also from each other.

Program:

- Technological development.
- Innovation and technologies as management subjects.
- Importance of innovation and technology in economic development.
- Characteristics of technologies.
- Technology life cycle.
- Elements of technology management
- Technology assessment
- Characteristic of innovation.
- The process of managing innovation.
- Innovation life cycle.
- Management of Research and Development.
- The commercialization of innovation and technology.
- Intellectual property rights.

Learning outcomes (what student should know after course)

- To understand and describe the complexity of innovation and technology management activity.
- To apply innovation and technology management skills in different business spheres.
- To analyze various innovation and technology problems.
- To know how to take decisions in innovation and technology environment.
- To work in a group as both a leader and a member.

Passing form:

Tasks during course, Final project.

Literature:

- Braun E., 1998: Technology in Context: Technology Assessment for Managers (Routledge Studies in the Management of Technology and Innovation). Publisher: Routledge; 1 edition
- Burgelman R., Christensen C., Wheelwright S., 2003: Strategic Management of Technology and Innovation . McGraw-Hill/Irwin; 4 edition.
- Afuah A., 2002: Innovation Management: Strategies, Implementation, and Profits. Oxford University Press, USA; 2nd edition
- United Nations Industrial development Organization, International Centre for Scientific and High Technology, Training Course on Technology Management.
- Pessenheim O., Change Management. Ventus Publ ApS.
- McKean D., IT Strategy and Technology Innovation. Ventus Publ. ApS.
- Brychan T., Miller C., Murphy L., Innovation and Small Business. Volume I. Ventus Publ AsP.
- Internet resources.