MIDDLE EAST TECHNICAL UNIVERSITY  
Dpt of Science and Technology Policy Studies  
Spring 2015  
STPS 555  
Research Commercialization and Knowledge Intensive Entrepreneurship  
Instructors: V. Sinan Tandoğan and M. Teoman Pamukçu  

Tuesday, 13.40-16.30  
Location: TBA  

Course description  

Research, innovation and entrepreneurship are the three critical pillars of the knowledge economy. Research and technology commercialization, or more specifically, knowledge-based entrepreneurship becomes one of the most important issues for the economic growth in the 21st century. However, there are many complexities and uncertainties in the linkages between scientific invention and business development. This course will focus on the recent developments concerning the knowledge transfer approaches including the new role of universities, public incentives in commercialization, improvements in intellectual property rights and mediator agencies between the academic and the industrial worlds. The distinct features and industrial dynamics of knowledge-based entrepreneurship will also be elaborated.  

This course is designed to contribute to the program by providing the insights to analyse the knowledge transfer mechanisms and technology commercialization in universities and industries.  

During the course, the participants are expected to acquire: i) understanding of the concept of knowledge transfer ii) Insights about the financing innovation iii) basic stages of knowledge based entrepreneurship; iv) functionality of technology transfer office at universities.  

By the completion of “title of this course” the participants will: i) have a clear view of the objectives and basic elements of technology commercialization ii) be able to analyse university-industry cooperation iii) become more capable of valuating research outputs.
Course Outline

Week 1: Introduction and overview
Week 2: Financing of R&D and Innovation
Week 3: Technology-based entrepreneurship: Theory (1)
Week 4-5: Technology-based entrepreneurship: Theory (2)
Week 6: Presentation and discussion of case studies
Week 7: Academic entrepreneurship
Week 8: Knowledge transfer from university to industry
Week 9: Presentation and discussion of case studies
Week 10-12: Progress report presentations on term paper assignment
Week 13-14: Presentations made by two experts in the field

Course conduct and grading

The course will be conducted via one-hour lecture and a two-hour class. Participants of the course will be informed about the reading material of the week in advance. All the participants are expected to read the related material prior to the lectures. Class discussion, ranging from informal talks to organized discussion days, will be an important part of the class.

Interim presentation: %20
Term paper: %60
Presence and class participation: %20
Selected reading list


OECD. (1998b). Technology, productivity and job creation; Best policy practices. OECD Publication