

| Course Description | | | | | |
|--|---|---|-------------------------|---------------------------|-------------|
| Name | Code | Semester | T+A Hour | Credit | ECTS |
| INNOVATION and ENTREPRENEURSHIP | COE3149190 | Fall Semester | 2+0 | 2 | 2 |
| Prerequisites Courses | | | | | |
| Recommended Elective Courses | | | | | |
| Language of Instruction | English | | | | |
| Course Level | First Cycle (Bachelor's Degree) | | | | |
| Course Type | Required | | | | |
| Course Coordinator | Assist.Prof. Kevser Banu KÖSE | | | | |
| Name of Lecturer(s) | Prof.Dr. Mehmet Kemal ÖZDEMİR, Assist.Prof. İlker KÖSE, Assist.Prof. Kevser Banu KÖSE | | | | |
| Assistant(s) | | | | | |
| Aim | Recognize the basic concepts about innovation, and entrepreneurship, interpret the common creative thinking methods, design an innovative business, evaluate the intellectual property rights, evaluate the fails and successes in start up experiences and apply a case study for preparation of a proposal to take grant from national funds for a techno-start up. | | | | |
| Course Content | This course contains; Self-assessment of the potential of self and entrepreneurship. Introduction to entrepreneurship, basic concepts and course content,The role of innovation and innovative entrepreneurship in business life,Creative thinking methods,Creative thinking methods – practice for creating new business ideas,The concept and components of the business plan. ,The business concept with functions, types, establishments, legal and financial responsibilities. The grants for Techno-Start ups in Turkey and application procedures,Intellectual property (IP) rights and the management of IP capital,The scenarios of establishment, expanding and getting investment as an entrepreneur in the national ecosystem.,How to prepare an Engineering Project Proposal for 2209A/B Grant Program?,Project management tools (Decision support systems),Literature review and tools (Mendeley, etc.). Plagiarism. YÖK Scientific Research and Publication Ethics Directive ,Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal,Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal,Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal. | | | | |
| Course Learning Outcomes | | | Teaching Methods | Assessment Methods | |
| Be able to explain the common concepts about technology, innovation, and entrepreneurship:Define technology, innovation, R&D, entrepreneurship, invention, and the relation between inventions, science, innovation and technology.Explain the recent progress and the changing role of the innovation management in business.Describe the innovation types, innovation creation frameworks, and procedures. | | | 1, 11, 2, 3 | A | |
| Be able to describe the national research funds and propose a projectBe able to propose a basic start-up companyRecognize the entrepreneurial potential within themselvesDefine national entrepreneurship and industrial grantsCompose the proposal for a techno-start up grantEvaluate the pros and cons of start-up experiences | | | 1, 11, 2, 3 | A | |
| Be able to arrange creative thinking methodsExplain the brainstorming, lateral thinking, morphological analysis, La Sella matrices, and TRIZ. | | | 1, 4, 8 | A | |
| Be able to explain the legal status of companies and how to establish a start-up and protect intellectual property rights, the national patent regulations and proceduresDistinguish the basic terminologies such as copy right, trade mark, patent, utility model, industrial design, and geographical signExplain the procedures of registering intellectual rights | | | 1, 11, 2, 3 | A | |
| Be able to business plan for a start-up by using lean business model canvasExplain the main components of a business plan, such as market research, management plan, production plan, marketing plan, and financial plan Compose a business model canvas for a start upExplain the pros and cos of a business model canvas | | | 10, 4, 8 | D | |
| Study effectively in disciplinary and multi-disciplinary teams and develop innovative projects with students from different programs. Be able to transform a research idea into an original project proposal, and present it. | | | 1, 10, 2, 3, 4, 8 | D, F | |
| Teaching Methods | 1: Lecture, 10: Brainstorming, 11: Seminar, 2: Question - Answer, 3: Discussion, 4: Exercise, Practice, 8: Teamwork | | | | |
| Assessment Methods | A: Written Exam, D: Project / Design, F: Performance task | | | | |
| Lecture Schedule | | | | | |
| Sequence | Topics | Preliminary Preparation | | | |
| 1 | Self-assessment of the potential of self and entrepreneurship. Introduction to entrepreneurship, basic concepts and course content | Basic search about being entrepreneur and critisizing the difference between being an entrepreneur and a preffessional staff in private, public or academic domain | | | |
| 2 | The role of innovation and innovative entrepreneurship in business life | Basic search about the relation between innovation and entrepreneurship and the relation and differences between R&D and innovation | | | |
| 3 | Creative thinking methods | How can we benchmark the algorithms. Why is a succesful algorithm or technic important? Which benefit can we get from the algorithms in our daily life, such as in time planning, issue management, etc.? Can we use some technics for a better and efficient thinking? | | | |
| 4 | Creative thinking methods – practice for creating new business ideas | Application steps of brain storming | | | |
| 5 | The concept and components of the business plan. | Reviewing some main contracts for companies | | | |
| 6 | The business concept with functions, types, establishments, legal and financial responsibilities. The grants for Techno-Start ups in Turkey and application procedures | The importance of production and management for the sustainability and successfulness of the company | | | |
| 7 | Intellectual property (IP) rights and the management of IP capital | What is intellectual property and how can we protect them? | | | |
| 8 | The scenarios of establishment, expanding and getting investment as an entrepreneur in the national ecosystem. | When the companies require expansion, for enlarging the market, new market penetration, etc. | | | |
| 9 | How to prepare an Engineering Project Proposal for 2209A/B Grant Program? | Adapting original business and research project ideas to grant application formats | | | |
| 10 | Project management tools (Decision support systems) | Supportive tools in project management | | | |
| 11 | Literature review and tools (Mendeley, etc.). Plagiarism. YÖK Scientific Research and Publication Ethics Directive | Basic definitions | | | |
| 12 | Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal | Business model canvas, research proposal | | | |
| 13 | Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal | Business model canvas , Research Proposal | | | |

| Lecture Schedule | | |
|--------------------|--|--|
| Sequence | Topics | Preliminary Preparation |
| 14 | Group/Individual Study of the students on Success and Fail Stories of Entrepreneurship, techno startup proposal, research proposal | Business model canvas, research proposal |
| Evaluation Methods | | Weight(%) |
| Midterm Exam | | 30 |
| General Exam | | 70 |

| Resources |
|---|
| 1. Peter Thiel, Blake Masters, Sıfırdan Bire, Start up'lar üzerine notlar ya da geleceęi inřa etmenin yolları, Pegasus yayıncılık. 2. Eric Ries, The lean start up, 3. Steve Blank, The Start up Owner's Manual |