KAZAN NATIONAL RESEARCH TECHNOLOGICAL UNIVERSITY

With the support of the
Erasmus+ Programme
of the European Union

EU Practices to Support Innovative Engineering Entrepreneurship

course description

developed by Dilbar Sultanova

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1. Course description

Course provider (institution)	Kazan National Research Technological University
Title	EU Practices to Support Innovative Engineering Entrepreneurship
Target group	students in Master's degree programme "Innovations in Chemical Technology: Project Management" at Faculty of Chemistry and Technology of Polymers in Medicine and Cosmetics
type (compulsory/optional)	compulsory
cycle (short/first/second/third)	
year of study when the component is delivered, semester/trimester when the component is delivered (if applicable)	1st year, autumn semester.
number of ECTS credits allocated (if applicable); estimated workload	2 ECTS credits
Name of lecturer(s)	Dilbar Sultanova, Doctor of Science in Economics, Chair of Department of Innovations in Chemical Technology
Mode of delivery (face-to-face/ distance learning etc.); number of contact hours	face-to-face, 25 contact hours
Language of instruction	Russian
Course aims	To give students an understanding of European Union practices to support innovative engineering entrepreneurship
Learning outcomes (LO)	Students will be able **LO1:** to list the EU measures to support innovative entrepreneurship; **LO2:** to describe the EU practices to facilitate SME innovative activities; **LO3:** to discuss the activities of the EU industrial chemical, petrochemical and plastic clusters; **LO4:** to analyse the role of universities in the EU innovative development; **LO5:** to compare the requirements of the EU R&D grant giving foundations.
Prerequisites and co-requisites (if applicable)	Intermediate level of the English language proficiency

Course content	1. An overview of the EU policy to support innovative entrepreneurship: – public expenditures on research and development; – communication of scientific research in the public sector with industry; – tax incentives for scientific research; – intellectual property issues; – participation in market research of small and medium enterprises. 2. Best EU practices to facilitative innovative activities of small and medium size business. Experience of Germany, Ireland, France, Finland, the Netherlands. 3. Functions and responsibilities of the EU industrial clusters, business-associations, trade chambers and economic development agencies to find their best practices in international entrepreneurship. 4. Mechanisms to support small and medium size businesses within industrial clusters. The course focuses on chemical, petrochemical and plastic clusters. 5. Universities and centers of competencies in industry as drivers of the EU innovative development. 6. The EU R&D commercialization funds. EU grant giving foundations and associations to support SMEs and procedures of collaboration between them. 7. Horizon 2020: participation of the Russian research groups and small innovative enterprises. 8. The EU research and development internationalization 9. Integrated approach to national policy development.
Recommended or required reading and other learning resources/tools	1. Internal Market, Industry, Entrepreneurship and SMEs Country https://ec.europa.eu/growth/industry/policy/innovation_en 2. European Cluster Initiatives https://www.clustercollaboration.eu/eu-initiatives/reports 3. Horizon2020 https://ec.europa.eu/programmes/horizon2020/en 4. EACEA National Policies Platform

	https://eacea.ec.europa.eu/national-policies/
Planned learning activities and teaching methods	**Teaching:** arranging lectures and seminars, receiving feedback on course from students, giving practical assignments or exercises (class/home) – individual and for groups/ teams, promoting critical thinking, constructive critics and self-criticism, stimulating students to formulate own opinions, supporting personal responsibility and promoting ethical principles **Learning active:** interactions between professor and students including participation in discussions, team/group exercises, collaborative teamwork, sharing experiences with peers, self-evaluation **Learning passive:** attending seminars, listening, watching and reading learning materials, remembering/ memorizing, repeating
Assessment methods	**LO1:** oral answers to questions regarding the EU policy to support innovative entrepreneurship during the seminar; **LO2:** an oral presentation of experience of a chosen EU member state to facilitate SME innovative activities; **LO3:** participation in a group discussion of the EU industrial clusters; **LO4:** a case study on the role of the EU universities in innovative development of industry; **LO5:** a presentation of a chosen EU R&D support foundation requirements.
Prepared by	Dilbar Sultanova
Approved by	Commission on Teaching and Learning of Faculty of Chemistry and Technology of Polymers in Medicine and Cosmetics
Date of approval	July 14, 2020, protocol #10

2. Course Structure

Course blocks	Description
Lectures (9 hours)	Presentations given by professor on course content materials
Seminars (16 hours)	General information on course content presented by professor and discussed in groups with students.
Independent group work home/online for presentations (25 hours)	Students revise the lecture materials to prepare for oral answers and reports during seminars. Students analyse and compare online resources to develop and give their presentations in class.
Assessment	Summative assessment based on results of oral reports, presentations and participation in group discussions during the seminars, presentation of a case study results, and evaluation of the written application for a grant.

3. Course Evaluation

Item	Score (0-5)	Comments and suggestions of reviewer(s)
1. Course aims	**5**	**The course aim focusses on several practices with EU, which is consistent with the course content and the real differentiation of support systems within EU.**
2. Course content	**4**	**The course considers the essential mechanisms and structures that play a role in the support systems for R&D in enterprises (esp. SME). It is notable that both aspects of an international system are addressed: variance between regional/national systems within EU and trends in internationalization and in integration. Anyway, requirements on funded activities, selection processes and related funding regulation have to be addressed or be a prerequisite for course participants.**
3. Target groups and prerequisites	**4**	**Basic knowledge of EU funding regulation (i.a. The General Block Exemption Regulation) a prerequisite or part of content.**
4. Learning outcomes	**4**	**The students should be able to assess the role of the national systems (on examples) that crucially influences the target groups´ (enterprises) interests and acceptance of supranational EU instruments.**

Reviewer:

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