

Course programme

Course code IFI8109.DT	Planning and Running Research and Development Projects		
ECTS credits: 4	Contact hours: 18	Semester: Spring	Examination
Course objective:	Develop ability to plan, analyze and evaluate research and development (R&D) projects, as well understanding peculiarity of R&D projects.		
Brief description of course content:	The concepts of projects and project management. Peculiarity and role of R&D projects in R&D activities. Composition methods and evaluation criteria of R&D projects. Planning R&D projects: determining an objective, research tasks/hypotheses, the title, activities/methodology. Resource planning, estimation of application potential. Reviewing R&D projects. Executing R&D projects. Application procedures and best practices. A number of R&D projects will be discussed. Independent work: 1) Development and presentation of a research project plan, 2) Reviewing of a research project plan of a fellow student, 3) Development and presentation of a development project plan (team work).		
Learning outcomes	A student is: • able to develop a R&D project plan • able to review an R&D project plan • aware of major problems of executing of R&D projects, and possibilities of their solving.		
Assessment methods	Examination is based on the assessment of the following documents: 1) Plan of a research project – 40% of the grade, 2) plan of a development project – 40%, 3) review of a research project – 20%.		
Responsible lecturer	Peeter Normak		
Title in Estonian	Teadus- ja arendusprojektide kavandamine ja täitmine		
Prerequisite course	None		
Compulsory literature	Public course materials can be found at http://www.tlu.ee/~pnormak/RD-projects-2016 Other materials will be sent to the students by e-mail.		
Replacement literature	Replacement literature is given to the students on individual bases, depending on the topic of the composed R&D projects.		
Subscription to the course and exam	All doctoral students are eligible to subscribe to the course. The students who attended on at least six classes are eligible to subscribe to the examination.		

	The examination work consists of three parts: 1) Research project plan; submission deadline – 11.03. 2) Review of a research project; submission deadline – 24.03. 3) Development project plan – submission deadline – 20.04. For passing the examination, all three parts should be completed.
Requirements for independent work	1) Completing home assignments; 2) Timely submission of the examination papers (two project plans and a review).
Assessment criteria	1. Criterion (research project plan, 40% of the grade) A – The research project plan (<i>RP</i>) is excellent in most of the criteria stated in the <i>Guidelines</i> and very good in the others. B – The RP is very good in most of the criteria. C – The RP is good in most of the criteria. D – The RP is satisfactory in most of the criteria. E – The RP is satisfactory in most of the criteria and some important parts of project plans are missing. 2. Criterion (review of a research project plan, 20% of the grade) A – The review and assessments are completely adequate and thorough. B – The review and assessments are adequate and thorough. C – The review and assessments have some gaps (some aspects are not discussed or receive inadequate review). D – The review and assessments have some deficiencies (some aspects are not discussed or receive inadequate/wrong review). E – The review and assessments have significant deficiencies (several aspects are not discussed or receive inadequate/wrong review) 3. Criterion (development project plan, 40% of the grade) A – The development project plan (<i>DP</i>) is excellent in most of the criteria stated in the <i>Guidelines</i> and very good in the others. B – The DP is very good in most of the criteria. C – The DP is good in most of the criteria. D – The DP is satisfactory in most of the criteria. E – The DP is satisfactory in most of the criteria and some important parts of project plans are missing.
Information about the content of the course	The classes will normally take place on Wednesdays, at 14:15-15:45 in A-402. 3.02 Introduction to the course (incl. organization of the course and examination; determination of the interests and needs of the students). The basic concepts of project and project management. The role of R&D projects in R&D activities. Examples of R&D-projects. Methods of planning of R&D-projects. 10.02 Analysis of home exercises. Evaluation criteria of R&D-project plans

	and reports. Peculiarity of R&D projects. 17.02 Seminar: presentation and rationale of the objective of research projects. 2.03 Planning of research projects: determining an objective, research tasks/hypotheses, the title, activities/methodology. Resource planning, estimation of application potential. Analysis of research project plans. 9.03 Seminar: presentation of research project plans. 16.03 Analysis of home exercises. Reviewing of R&D projects. Planning of development projects. 30.03 Analysis of home exercises. Analysis of development projects. 6.04 Analysis of home exercises. Usage of principles of general project management in executing R&D projects. Application procedures and best practices. 13.04 Seminar: presentation of development project plans. Reflections to the course.
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Academic unit:	School of Digital Technologies
Author of the course programme	Peeter Normak
Signature:	/signed digitally/
Date:	16.01.2016

Couse programme is registered at the institute

Date:	18.01.2016
Study assistant:	Ingrid Sander
Signature:	