

RESEARCH PROJECT IN INNOVATION AND TECHNOLOGY MANAGEMENT

Course code	<i>GRAI023</i>
Compulsory in the programme	<i>Innovation and Technology Management</i>
Level of studies	<i>Graduate</i>
Number of credits	<i>6 ECTS; 24 hours of theory and 52 hours of practice, 284 hours of self-study,</i>
Course coordinator	<i>Prof. Dr. Vida Skudiene, Dr. Dovile Barauskaite, Assoc.Prof. Egle Verseckaite-Grzeskowiak</i>
Prerequisites	<i>Undergraduate diploma</i>
Teaching language	<i>English</i>

THE AIM OF THE COURSE

The main goal of this course is to impart knowledge and skills necessary for conducting and evaluating research in innovation and technology management field. The course will begin with the introduction to the fundamental principles that underlie approaches to research and the practical implications of these principles, including formulation of research questions, concepts of validity and reliability, and issues of research ethics. We will then proceed to unpack the main qualitative and quantitative methods used in business research. Conducting their own research projects will help develop students' practical research skills, and analysis of published research and other students' research projects will sharpen their ability to critically evaluate the information coming from research conducted by others. Presentation of their own research findings and discussion of others' research will also serve to refine the students' presentation and communication skills. Students who have successfully completed the course and all its assignments will be able to define the research question, formulate the research design, choose the appropriate methods for data collection and analysis, present and apply their findings, and critically evaluate other researchers' output. Finally, the skills and knowledge gained in this course will also be employable during the preparation of their final theses.

MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESMENT AND TEACHING METHODS

Course level learning outcomes (objectives)	Degree level learning objectives (Number of LO)	Assessment methods	Teaching methods
CLO1. Critically evaluate the relevance of business research in managerial decision-making.	LO1.1. Students will be able to define the business problem and develop innovative solutions .	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, home assignments, individual study
CLO2. Have a critical awareness of research issues, methodologies, and methods used in business and management as well as understanding of potential ethical problems of the research.	LO1.3. Students will be able to demonstrate critical thinking in problem solving.	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, individual study, home assignments
CLO3. Obtain skills and analytical competences to identify a business problem/need, translate it into a research question, and design an appropriate way to answer it.	LO2.1. Students will be able to evaluate past and current practices in their discipline from an ethical perspective .	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, individual study, home assignments
CLO4. Be able to use the main qualitative and quantitative strategies of business research. Evaluate their advantages and disadvantages and appropriate application areas.	LO1.2. Students will become independent learners and develop their own comprehension of scientific theories,	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, individual study, home assignments

	models, and concepts.		
CLO5. Develop skills and analytical competences to design a research project and collect data.	LO1.2. Students will become independent learners and develop their own comprehension of scientific theories, models, and concepts.	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, team work, individual study, home assignments
CLO6. Obtain skills to analyze data and draw reasonable interpretations as well as communicate research findings in a clear and well organized way.	LO3.1. Students will develop and deliver a coherent oral presentation .	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, individual study, home assignments
CLO7. Develop skills to critically evaluate the quality of other researchers' findings and the process used to obtain them.	LO3.2. Students will develop and deliver a coherent written research paper .	Research project paper and defence assessment, Research Project Sketch & Topic presentation assessment	In-class discussions, individual study, home assignments

Quality Assurance Measures

The lecturer assures a variety of teaching methods and timely feedback to students. The feedback from students will always be highly valued and appreciated. The course is designed to maximize active engagement by students in their own learning process and the successful achievement of the learning outcomes is dependent upon the quality of such engagement. Depending on the particular situation in class, this syllabus may be adjusted, in that case the students will be informed during lectures and via the e-learning notification system.

Course content

Day	Topic	Contact Hours	
		Lecture	Practice
Feb 2 12:30-20:00	Introduction to the course. Organizational details of the course. Lecture 1. The research project and thesis writing process.	2	
	Lecture 2. The nature and process of research in innovation management. Research idea generation. Finding research ideas.	2	
	Seminar 1. Generating and discussing ideas for your research, thinking about research topic. Presentation of the research sketches.		2
	Seminar 2. Generating and discussing ideas for your research, thinking about research topic. Presentation of the research sketches.		2
Feb 3 9:00-12:15	Lecture 3. Design of research project proposal. Research topic, question, aim, and objectives.	4	
Feb 3 13:15-16:30	Lecture 4. Development of Introduction and Literature Review. Lecture 5. Organizing and structuring your Introduction and Literature Review. Research ethics. Discuss the plagiarism example	4	
	Home assignment: Developing research topic, research question, aim, objectives, and research model. Looking for the literature supporting the research topic relevance and context. Project Topic Presentation. Opponent groups prepare questions and recommendations.		
Feb 9 12:30 – 20:00 ONLINE Feb 10 9:00-16:30 ONLINE	Seminars 3 and Seminar 4. Discussing the research relevance, context, question, aim and objectives. Research Project Topic presentations.		16

Day	Topic	Contact Hours	
		Lecture	Practice
Feb 24 13:15-16:30 ONLINE	Lecture 6. Dr. Dovile Barauskaite Quantitative research method Survey design. Formulating hypotheses. Sampling. Scales. Reliability and validity.	4	
March 8 16:45-20:00 ONLINE	Lecture 7. Assoc. Prof. Dr. Egle Verseckaite-Grzeskowiak Qualitative research method Research questions for qualitative study, sampling; research instruments, interviews; projective techniques; focus groups.	4	
	Home assignment: Developing research design(sample, instrument, conceptual model, hypotheses), methods of data collection, preparing thesis research proposal paper and presentation. Consultations with thesis advisor.		
March 4	Submission of a preliminary research project (thesis) topic (appendix 1, Master Thesis Requirements document) on e-learning by 18:00		
March 11	Appointment of research project (thesis) advisors. Information provided on e-learning.		
April 15	Submission of Thesis Research Proposal paper on e-learning by 18:00		
		24	36
April 19-20 ONLINE	Thesis Research Proposal Defense.		16
	Total number of contact hours	24	52

FINAL GRADE COMPOSITION

Type of assignment	%
<i>Group Components 60%</i>	
Thesis Research Proposal Paper	30
Thesis Research Proposal Defense	30
<i>Individual Components 40%</i>	
Research Project Sketch Presentation	10
Research Project Topic Presentation	20
Active participation (opponent role)	10
Total:	100

DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT

RESEARCH PROJECT

The innovation and technology management research project in this course should be viewed as preparation for developing your final thesis. **IMPORTANT. After the RP Topic presentation** students have to decide whether they would like to prepare Research Proposal Paper and Master Thesis in pairs or individually.

RESEARCH PROJECT TOPIC PRESENTATION (20%)

An in class presentation (Power Point) of Research Project Topic including these parts: topic, research relevance and context, research question, aim, and objectives (3 slides). Presentation time is 5 min. The discussion time is 5-10 min. during which the opponents and fellow students will ask you questions. The presentation should be uploaded on e-learning and send to the opponent group one day before the presentation, no later than **Feb 7** based on the group presentation schedule. No late submission is accepted. The professor's feedback will be provided during the discussion or individual consultations.

ACTIVE PARTICIPATION- OPPONENT ROLE (10%)

Each group has an opposing group assigned. The assigned opponent groups shall review the assigned group slides and prepare of 2-3 questions and suggestions for the research ideas to be presented during the discussion in class.

THESIS RESEARCH PROPOSAL PAPER (40%)

The thesis RP paper – an extended Word document with finalized Research Proposal paper must be uploaded on e-learning platform not later than **April 15 (23:59)**. No late submissions is accepted. The paper should be 3000-4000 words document without references. It is equivalent to the Introduction and Literature Review chapters of the thesis and can be included as a part of the master thesis after a successful defence. It must demonstrate the students' reply to the three main foci of this course, i.e. relevance of the chosen research question, literature review, and research methodology. The paper is evaluated by the thesis advisor and the course lecturer. The suggested structure of the Thesis Research Proposal Paper is the following: Thesis research proposal topic, originality and value to science and management, research question, aim and objectives, problem definition(theoretical basis of the research), research design (sample, instrument, conceptual model, hypotheses), methods of data collection, sequence in which the intended research will be carried out, list of references.

NOTE. Late submissions of Thesis Research Proposal Paper will be given a grade of "0". **Papers that have plagiarism issues** will also be given a "0" and reported to the study commission for disciplinary measures. Those who do not manage to get a passing grade for the Thesis Research Proposal Paper do not earn the right to defend the proposal.

THESIS RESEARCH PROPOSAL DEFENSE (30%)

The defense is a 5-minute Power Point presentation of the Thesis Research Proposal. The suggested structure of the Thesis Research Proposal PP is the following: Thesis research proposal topic, originality and value to science and management, research question, aim and objectives, problem definition(theoretical basis of the research), research design (sample, instrument, conceptual model, hypotheses), methods of data collection and analysis, sequence in which the intended research will be carried out, list of references. The committee (2-3 professors) ask questions regarding all the parts of the proposal (topic, aim, method, etc.) during the defense and evaluate the proposal presentation. The thesis advisors are encouraged to attend the defense as observers but cannot contribute to the grading of the defense. The defense will be conducted on **April 19** and **April 20** The detailed schedule will be provided two days before the defense date.

RETAKE

In case The Thesis Research Proposal will not be successfully defended the opportunity to re-defend it may be granted only in exceptional cases related with health and extreme situation issues.

CHEATING AND PLAGIARISM PREVENTION

Teaching and evaluation methods of the course favor learning and creativity as opposed to cheating. All the submitted PPPs and the RP papers will be checked on Turnitin and are expected to be the product of the one's own thought process. Information from other sources may be used; however, credit must be given by using in-text citations. If the work of someone else (whether it is quoted or paraphrased) is not properly cited in the assignment, that is plagiarism. In cases of cheating and plagiarism, the student(s) will be subject to the consequences outlined in The Code of Ethics of the university.

DEADLINES AND DETAILS

Meeting deadlines and taking care of details are of extreme importance in the business world. Failure to do so can result in loss of job, promotions, clients, etc. Therefore, for each assignment that is not turned in on time, a grade of "0" will be given. Elements of work that do not match the official requirements will be penalized, especially if there are repeated mistakes. Students are expected to always strive to do their best.

COMMUNICATION

The students must use their official ISM e-mail to contact the lecturers and clearly indicate the **course name and the subject matter of the question** in the subject line of the e-mail. Whenever the students have to submit their work, their names must be clearly indicated on the document and the document must be properly formatted according to ISM requirements. The file names of e-mailed documents, such as the research project, must include the **students' last names**. It is very important that you follow these rules so your e-mails and submissions do not get lost.

REQUIRED READINGS

1. Sounders, M.K., Lewis, Ph., and Thornhill, A. (2019). *Research Methods for Business Students*. 8th edition. Pearson, UK. The e-book is available on e-learning system.

ADDITIONAL READINGS

2. Biggam, J. (2015). *Succeeding with your Master Dissertation. A step-by-step handbook*. 3rd ed. McGraw Hill Education
3. DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.
4. Field, A. (2016). *Discovering statistics using IBM SPSS statistics*. Sage Publications.
5. Hair, Jr., Joseph F., Wolfinbarger Celsi, Mary, Ortinau, David J., and Robert P. Bush. (2017). *Essentials of Marketing Research*. 4th edition. McGraw Hill Irwin
6. Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.
7. Skudiene, V., Li-Ying, J. & Bernhard, F. (2020). *Innovation Management. Principles from strategy, product, process and Human Resources research*. Edward Elgar, UK
8. Thomas. G. (2013). *How to do your research project*. 2nd ed. SAGE Publications
9. Wallace, M. * Wray, A. (2016). *Critical reading and writing for postgraduates*. 3rd ed. SAGE Publications