

Subject Title: Scientific Research Methodology

Course Basic Information	
Academic Unit:	Faculty of Civil Engineering
Course title:	Scientific Research Methodology
Level:	Master
Course Status:	Elective
Year of Study:	I (year)– semester I(first)
Number of Classes per Week:	1+1
ECTS Credits:	3
Time /Location:	According to time table
Teacher:	Prof.ass. Dr. Ragip Hadri
Contact Details:	e-mail: ragip.hadri@uni-pr.edu
Course Description:	
Course Description:	Course Scientific Research Methodology a basic professional course that aims to enable and practice students' academic research that will support the work in the field of scientific and professional civil engineering research. In particular, topics related to methods, techniques, tools and mechanisms that serve to find, analyze, interpret and recommend solutions to various hypothetical problems in the field of civil engineering will be particularly learned. Forms and ways of promoting the results of academic research will also be learned.
Course Goals:	
Course Goals:	<p>Familiarity with the theoretical framework of academic research, problem definition, research questions and research methods in academic work:</p> <ul style="list-style-type: none"> -Gaining knowledge of the basic concepts of the philosophy of science; - Developing critical and analytical skills; - Developing argumentation skills; - Clarity in presentation and communication of design and research; <p>Excellence in academic writing and communication skills.</p>
Expected Learning Outcomes:	
Expected Learning Outcomes:	<p>Upon completion of this course, students should be able to:</p> <ul style="list-style-type: none"> - Explain what a theoretical framework is; - Create a theoretical framework that will support research; - Identify a number of authors and creators who write about key ideas of the theoretical framework; - Develop an academic report outlining the main research questions that need to be answered in the research thesis as well as the appropriate methods to answer them; - Explain ethical values and issues related to civil

	<p>engineering activity. After completing the course, the candidates will be able to write various reports and will be able to complete a scientific thesis including the Master thesis.</p>										
Student Workload (should be in compliance with student's Learnign Outcomes)											
Activity	Hours	Day/ Week	Total								
Lectures	2	15	30								
Theory/ Lab Work/Exercises	1	15	15								
Practical Work											
Preparations for intermediary test											
Consultations with the teacher	0.2	15	3								
Field Work											
Test, seminar paper	1	10	10								
Homework											
Self-study (library or home)	1	5	5								
Preparation for final exam	1	7	7								
Assessment time (test, quiz, final exam)	3	1	3								
Projects, presentations, etc.	2	1/1	2								
Total			75								
Teaching Methods:	<p>Seminars and lectures: Discussing the role of theories for practices in the field of civil engineering Explaining the ways in which theories have been translated into practice in various fields (especially technical, environmental and civil engineering Clarifying the role and importance of research for design practices and vice versa; Promoting active student engagement in research discussions, simulations, roles, and promotion.</p>										
Assessment Methods:	<p>The evaluation methods and passing criteria for the course which is 100% in total, are divided by:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Attendance at lectures,</td> <td style="width: 20%; text-align: right;">10%</td> </tr> <tr> <td>Participation and engagement in exercises,</td> <td style="text-align: right;">30%</td> </tr> <tr> <td>Work student presentation</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Final exam (written and test),</td> <td style="text-align: right;">50%</td> </tr> </table>			Attendance at lectures,	10%	Participation and engagement in exercises,	30%	Work student presentation	10%	Final exam (written and test),	50%
Attendance at lectures,	10%										
Participation and engagement in exercises,	30%										
Work student presentation	10%										
Final exam (written and test),	50%										
Primary Literature:	<p>1 Leksionet e përmbledhura, Prof.ass. Ragip Hadri</p>										
Additional Literature:	<p>1. Zelenika, R. “Metodologija i tehnologija israde znanstvenog i strucnog djela”, Rijeka, 1999 2. Fellows, R. F. & Liu, A., “Reseach Method for Construction”, Oxford, 2008.</p>										

Designed teaching plan	
Week	Title of the Lecture
Week 1:	<i>Research (definition, characteristics, objectives)</i>
Week 2:	<i>Scientific research (research methods and scientist)</i>
Week 3:	<i>Research Process</i>
Week 4:	<i>Research Process</i>
Week 5:	<i>Observing the problem, formulating the question / need of people.</i>
Week 6:	<i>Defining research problem, techniques and tools.</i>
Week 7:	<i>Methodology v.s methods</i>
Week 8:	<i>First assessment</i>
Week 9:	<i>Data collection and method. of surveys, interviews, questionnaires, etc.</i>
Week 10:	<i>Interpreting data with academic writing</i>
Week 11:	<i>Interpret data with graphs and maps.</i>
Week 12:	<i>Dissemination of results</i>
Week 13:	<i>Citation and its policies</i>
Week 14:	<i>Regulations and standards for citation.</i>
Week 15:	<i>Second Assessment.</i>

Academic Policies and Code of Conduct

- Entering the hall at the correct time according to schedule. Delayed entry impedes the learning process;
- Keeping calm in learning and adhering to a code of ethics;
- The student has no right to make more than 3 absences in lectures and exercises;
- Cell phones and other electronic devices must be turned off during the learning process;
- Laptops and tablets are only allowed to be used quietly during exercise. Other activities such as checking personal e-mail or browsing websites are prohibited;
- No Inappropriate use of resources (Plagiarism), prohibited and punished according to the code of ethics;
- Students who have a positive assessment in semester work are eligible to take ECTS, and to take the subject examination. who are in compliance with the norms and standards of the Faculty and have a positive grade on the exam

Contacting the professor on matters related to the subject is done only through the official e-mail.

Note | If a student's semester paper is rated below 51%, then he / she must repeat the subject / will lose the right to take the final exam.