

Study program: Geo-Information Technologies

Qualification: PhD

General Information	
University	National University of Architecture and Construction of Armenian (NUACA)
Course title	“Research Methods”
Course/Module code	
Course type	Compulsory
Year of Study	1 st Year
Term/Semester	Fall Semester
Credits awarded	3 (ECTS)
Degree	PhD
Enrollment status	Full-Time
Prerequisites and co-requisites (if applicable):	There are no mandatory prerequisites for this course.

Lecturer’s details	
Name, surname	Varazdat Hovhannisyan
Academic title	Associate Professor
Contact details	Email: vhovhannisyan@nuaca.am
Office hours and consultation schedule	10:00-16:30, Monday - Friday

Course Structure		
Type (compulsory/ optional):	Compulsory	
Course Goal	<p>The course aims to strengthen the doctoral student’s ability to choose methods for data collection and analysis and to consider questions regarding research ethics. The purpose is also to contribute to the doctoral student’s ability to interpret and critically evaluate studies in technology and learning regarding method choices. This course will provide an opportunity for participants to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course will prepare students to elaborate a research proposal. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. Participants will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, social, local and global environment.</p>	
	In credits (ECTS)	In hours
		Semester

Duration and ECTS Credits	3	24	Fall
Learning Outcomes	<p>After completing this course, the PhD students should be able to:</p> <ul style="list-style-type: none"> • Compare different research methods in technology and learning and discuss the connection between method and basic methodological assumptions • Be aware of the ethical principles of research, ethical challenges and approval processes • Reflect on and discuss study design, including choice of research methods and its possibilities and limitations in relation to different research questions. • Reason about the basic choices regarding studies with quantitative and qualitative approaches. • Reflect on and discuss ethics and quality aspects that concern data collection and analysis. • Identify the components of a literature review process • Critically analyze published research • Develop research proposal 		
Syllabus (List of lessons)	Module 1	Foundations	
		<ul style="list-style-type: none"> • Introduction to Research and the Research Process • Research Ethics and Integrity • Critical appraisal 	
	Module 2	Quantitative Research	
		<ul style="list-style-type: none"> • Introduction to Quantitative Research, Study Designs and Methods • Analysis and Interpretation of Quantitative Data • Critical Appraisal of Quantitative Research 	
	Assignment #1	<p>Critiques of articles Everyone will critique an article based on quantitative research found in a major mass communication journal. The critiques should be 3-5 pages long.</p>	
	Module 3	Qualitative Research	
		<ul style="list-style-type: none"> • Introduction to Qualitative Research, Study Designs and Methods • Analysis and Interpretation of Qualitative Data • Critical Appraisal of Qualitative Research 	
	Assignment #2	<p>Critiques of articles Everyone will critique an article based on qualitative research found in a major mass communication journal. The critiques should be 3-5 pages long.</p>	
	Module 4	Mixed Methods Research	

	<ul style="list-style-type: none"> • Introduction to Mixed Methods Research, Study Designs and Methods • Analysis and Interpretation of Mixed Methods Data • Critical Appraisal of Mixed Methods Research
Assignment #3	<p>Critiques of articles</p> <p>Everyone will critique an article based on mixed methods research found in a major mass communication journal. The critiques should be 3-5 pages long</p>
Module 5	Research Proposal
	<ul style="list-style-type: none"> • Conceptualization and measurement • Sampling and survey research • Research Design & Experiments • Research Proposal
Assignment #4	<p>Development of Research Proposal</p> <p>The research proposal is a detailed plan or the study that student is going to conduct. You need to write a 5–7-page research proposal on the topic that student had approved early in the semester. For the research methodology student may select a survey, content analysis, field work, experiments, secondary analysis of data or an empirical qualitative method such as focus groups or in-depth interviews.</p>
Assessment methods and criteria	<p>Final exam with 20-point grade.</p> <p>To successfully complete this course, students must achieve a passing grade of 40% or higher on the overall course and 50% or higher on the mandatory final project. Under the final project students should develop a research proposal.</p>
Recommended textbooks and links (in order of relevance):	<p>Required text and materials</p> <ol style="list-style-type: none"> 1. Creswell, J. W. <i>Research design: Qualitative, quantitative and mixed methods approach</i>. 5th Ed. Thousand Oaks, CA: Sage, 2018. ISBN: 978-1-5063-8670-6 2. TRU Library. <i>APA Citation Style - Quick Guide</i>. 6th edition. 2011. Type: Online Guide <p>Retrieved from https://tru.ca/shared/assets/apastyle31967.pdf</p>