PHDA601 - Research Methods and Practices

Course Title	Research Methods and Practices					
Course Code	PHDA601					
Course Type	Compulsory					
Level	PhD					
Year / Semester	3 rd Semester (or 1 st if the student is exempted from the Graduate Master's Level Coursework)					
Teacher's Name	Yiannis Toumazis					
ECTS	7	Lectures / week	2	Laborato	ories /	NA
Course Purpose	This course aims to educate doctoral students on the methods employed by the researcher to conduct research and on the practices employed in research related activities such as activities related to research proposals, refereed publications and research outcome presentation and reporting.					
Learning Outcomes	 By the end of this course, students will be able to: (a) demonstrate an understanding of the role and significance of the key elements of the research process; (b) use effectively the available sources of information and data in relation to the research process; (c) appreciate the need for validating and evaluating the research results and outcomes; (d) employ internationally established practices concerning research integrity, as well as research ethical and legal issues; (e) show competency in disseminating research results through scientific conferences and refereed journal publications; (f) demonstrate competency in writing and presenting a successful research proposal, as well as a research final report; 					
Prerequisites	Completion of at least 50 ECTS Corequisites None credits at the Master's Level Coursework					
Course Content	 Research: research process, primary research, applied research, research methods and research methodology, key elements of the research process. Research design: methodology, sources of information, references, bibliography and literature reviews, record keeping, data management, validation and evaluation of the research outcome. 					



Ethics and legal compliance: Human subjects, using children as subjects, using animals as subjects, ethics compliance procedures and bodies, handling personal data. Research integrity and misconduct: Citations, plagiarism, falsification, misrepresentation, conflict of interest. Dissemination of research results: illerature review papers, the paper reviewing process and criteria, research papers for a refereed journal or conference, open access, and other means for dissemination. Research proposals: proposals to secure research funding, research proposals for graduate studies research, key elements for a successful research proposal. Proposal report and presentation. Research Reports: Key elements of the doctoral Thesis, the PhD defense process and oral defense elements. Research output exploitation: Technical reports, Intellectual Property Rights and Patents. Tecourse is delivered to the students by means of lectures, conducted with the help of computer presentations. Lecture notes and presentations are available through the e-learning facility. Teaching material consists of lectures notes prepared by the instructor. The lecture notes for each topic are provided with links to documents, reports and guidelines related to the topic. An indicative list is given below. 1. ALLEA, "The European Code of Conduct for Research Integrity", url: https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics.code-of-conduct en.pdf 2. IEEE, "identifying Plagiarism", url: https://ex.europa.eu/research/participants/glagiarism/id-plagiarism.html 3. E-Learning Tees, "Interpreting Turnitin Originality Reports", url: https://www.ieee.org/publications/rights/plagiarism/id-plagiarism.html 3. E-Learning Tees, "Interpreting Turnitin Originality Reports", url: https://www.ieee.org/publications/inghts/plagiarism/id-plagiarism.html 3. E-Learning Tees, "Interpreting Turnitin Originality Reports", url: https://www.ieee.org/publications/inghts/plagiarism/id-plagiarism.html 4. Elsevier, "Successful grant writin	- 2	**		
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	Language	English		