

Course Title	Research Methods and Methodology				
Course Code	HSA-590				
Course Type	Elective				
Level	2 nd Cycle				
Year / Semester	2 / 3				
Teacher's Name	Dr Christiana Demetriou Dr Costas Constantinou Dr Neophytos Stylianou				
ECTS	10	Lectures	12	Interactive learning activities	22
Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> • Equip students with the knowledge and skills to conduct high-quality research relevant to Public Health and Health Care, comprising of all steps involved: assess the needs, generate research questions, literature search for existing evidence, study design (including sample size requirements), study conduct (including appropriate sampling, assessment, statistical analysis), presentation of results, communication of conclusions (article write up, oral presentation, media). • Equip students with the skills to apply appropriately and effectively the quantitative research concepts and techniques covered throughout the programme to answer research questions relevant to Public Health and Health Care. • Cover and explain in detail the major qualitative research methods used in social and behavioural research and equip students with the ability to apply these for answering relevant Public Health and Health Care issues. 				
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ol style="list-style-type: none"> 1. Identify and examine issues compromising public health and assess the needs for conducting a research study to address these. 2. Generate relevant and testable research questions in the context of Public Health. 3. Systematically search for evidence using the appropriate search engines and databases (e.g. PubMed Health, Cochrane Library). 4. Critically evaluate the existing literature and identify and examine gaps in knowledge on topics relevant to Public Health. 5. Choose the most appropriate study design for answering specific research questions relevant to Public Health. 6. Design quantitative observational research studies for answering a research question in the context of Public Health. 7. Design quantitative interventional research studies for answering a research question in the context of Public Health. 8. Estimate sample size requirements by performing study power analysis. 9. Choose the most appropriate sampling method for a given research scenario relevant to Public Health 				

	<ol style="list-style-type: none"> 10. Perform accurate variable assessment for a given research scenario relevant to Public Health 11. Choose the right data analysis technique for a given research scenario relevant to Public Health. 12. Perform statistical analysis and generate appropriate results for a given research scenario relevant to Public Health. 13. Present study results appropriately for a given research scenario relevant to Public Health. 14. Derive conclusions based on study findings. 15. Demonstrate deep understanding and apply the major methodologies involved in qualitative research, relevant to social and behavioural sciences in the context of Public Health. 16. Design qualitative research studies involving participant observations for answering a research question in the context of Public Health. 17. Design qualitative research studies involving individual interviews for answering a research question in the context of Public Health. 18. Design qualitative research studies involving focus groups for answering a research question in the context of Public Health 19. Write up a complete research proposal and prepare a grant application for funding in national and international funding bodies. 20. Write-up a scientific article presenting original study findings relevant to Public Health. 21. Communicate study results and conclusions to the media and lay audiences. 22. Perform an oral presentation on original study findings relevant to Public Health 		
Prerequisites	HSA-511, HSA-512, HSA-513, HSA-521, HSA-522, HSA-523	Required	None
Course Content	<ol style="list-style-type: none"> 1. Assessing needs for conducting a research study relevant to Public Health 2. Generating research questions and systematically searching and critically evaluating the existing literature 3. Designing the appropriate quantitative study for answering a research question I: observational research 4. Designing the appropriate quantitative study for answering a research question II: interventional research 5. Estimating sample size requirements (power analysis) 6. Quantitative study conduct I: Choosing the most appropriate sampling method 7. Quantitative study conduct II: Performing accurate variable assessment 8. Quantitative Study conduct III: Choosing the right statistical technique and performing analysis 		

	<p>9. Quantitative study conduct IV: Results presentation and deriving conclusions in quantitative research</p> <p>10. Design and analysis in qualitative research</p> <p>11. Writing up a research proposal and applying for funding</p> <p>12. Communication of results and conclusions I: article write-up</p> <p>13. Communication of results and conclusions II: oral presentation</p> <p>14. Communication of results and conclusions III: media and lay audiences</p>																														
Teaching Methodology	This programme is delivered via distance learning (online) and includes recorded lectures, interactive online tutorials (Webinars) and discussion forums, as well as online exercises and other activities.																														
Bibliography	<p>Required Textbooks / Reading:</p> <table border="1" data-bbox="472 604 1455 1062"> <thead> <tr> <th>Title</th> <th>Author(s)</th> <th>Publisher</th> <th>Year</th> <th>ISBN</th> </tr> </thead> <tbody> <tr> <td>Public Health Research Methods (1 Har/Psc ed.)</td> <td>Guest GS, Namey EE</td> <td>SAGE Publications, Inc.</td> <td>2014</td> <td>978-1452241333</td> </tr> <tr> <td>Epidemiology in Medicine 1st Edition</td> <td>Hennekens (Author), Julie E. by Charles H. Buring (Author)</td> <td>Sherry L. Mayrent (Editor)</td> <td>1987</td> <td>978-0316356367</td> </tr> </tbody> </table> <p>Recommended Textbooks / Reading:</p> <table border="1" data-bbox="472 1136 1455 1896"> <thead> <tr> <th>Title</th> <th>Author(s)</th> <th>Publisher</th> <th>Year</th> <th>ISBN</th> </tr> </thead> <tbody> <tr> <td>Mastering Public Health: A Postgraduate Guide to Examinations and Revalidation, (2nd ed.)</td> <td>Lewis G, Sheringham J, Bernal JL, Crayford T</td> <td>CRC Press</td> <td>2014</td> <td>978-1444152692</td> </tr> <tr> <td>Research methods in community medicine: surveys, epidemiological research, programme evaluation,</td> <td>Abramson, J. H.</td> <td>Wiley</td> <td>2008</td> <td>978-0470986615</td> </tr> </tbody> </table>	Title	Author(s)	Publisher	Year	ISBN	Public Health Research Methods (1 Har/Psc ed.)	Guest GS, Namey EE	SAGE Publications, Inc.	2014	978-1452241333	Epidemiology in Medicine 1st Edition	Hennekens (Author), Julie E. by Charles H. Buring (Author)	Sherry L. Mayrent (Editor)	1987	978-0316356367	Title	Author(s)	Publisher	Year	ISBN	Mastering Public Health: A Postgraduate Guide to Examinations and Revalidation, (2 nd ed.)	Lewis G, Sheringham J, Bernal JL, Crayford T	CRC Press	2014	978-1444152692	Research methods in community medicine: surveys, epidemiological research, programme evaluation,	Abramson, J. H.	Wiley	2008	978-0470986615
Title	Author(s)	Publisher	Year	ISBN																											
Public Health Research Methods (1 Har/Psc ed.)	Guest GS, Namey EE	SAGE Publications, Inc.	2014	978-1452241333																											
Epidemiology in Medicine 1st Edition	Hennekens (Author), Julie E. by Charles H. Buring (Author)	Sherry L. Mayrent (Editor)	1987	978-0316356367																											
Title	Author(s)	Publisher	Year	ISBN																											
Mastering Public Health: A Postgraduate Guide to Examinations and Revalidation, (2 nd ed.)	Lewis G, Sheringham J, Bernal JL, Crayford T	CRC Press	2014	978-1444152692																											
Research methods in community medicine: surveys, epidemiological research, programme evaluation,	Abramson, J. H.	Wiley	2008	978-0470986615																											

	clinical trials				
	Research Methods in Health: Investigating Health and Health Services	Ann Bowling	Open University Press	2009	978-0335233649
	Doing a Systematic Review: A Student's Guide (1 st ed.)	Boland A, M, Cherry G, Dickson R.	SAGE Publications Ltd	2013	978-1446269688
	Cochrane Handbook for Systematic Reviews of Interventions (Ver. 5.1.0)	Higgins JPT, Green S.	The Cochrane Collaboration	2011	978-0470699515
	Introduction to Meta-Analysis (1 st ed.)	Borenstein M, Larry V. Hedges LV, Higgins JPT, Rothstein HR	Wiley	2009	978-0470057247
	Qualitative Methods in Public Health: A Field Guide for Applied Research (2 nd ed.)	Tolley EE, Ulin PR, Mack N, Robinson ET, Elizabeth T. Robinson, Succop SM	Jossey-Bass	2016	978-1118834503
Assessment	Participation (10%) Research proposal for grant application (90%)				
Language	English				