

Course Title	Epidemiology and Prevention of Chronic and Infectious Diseases in a Global Context				
Course Code	MPH-521				
Course Type	Required				
Level	2 <sup>nd</sup> Cycle				
Year / Semester	1 / 2				
Teacher's Name	Dr Angeliki Lambrou Dr Christiana Demetriou				
ECTS	10	Lectures	18	Interactive learning activities	15
Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> <li>• Demonstrate in depth knowledge and describe in detail the epidemiology of the major chronic and infectious conditions causing the biggest burden on developed and developing societies and critically evaluate national and international preventive initiatives aiming at tackling these.</li> <li>• Demonstrate deep understanding and describe the different epidemiological paradigms for the aetiology of chronic conditions, as well as major and emerging and re-emerging infectious conditions in developed and developing societies.</li> <li>• Demonstrate deep understanding and analyse the dynamics of infectious disease outbreak and describe measures of control and surveillance</li> <li>• Outline major emerging and re-emerging infectious conditions in the developed and developing world and describe the concept of migrant/refugee health concerning infectious disease.</li> <li>• Demonstrate deep understanding and analyse the principles of immunization and the basic methodologies involved in the design of such programmes, also highlighting the phenomenon of vaccine hesitancy.</li> </ul>				
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ol style="list-style-type: none"> <li>1. Demonstrate deep understanding and describe in detail the epidemiology of cardio metabolic and cerebrovascular conditions in the developed and the developing world.</li> <li>2. Demonstrate deep understanding and describe in detail the epidemiology of malignancies in the developed and the developing world.</li> <li>3. Demonstrate deep understanding and describe in detail the epidemiology of dementia and other neurodegenerative conditions in the developed and the developing world.</li> <li>4. Demonstrate deep understanding and describe in detail the major epidemiological paradigms for the aetiology of chronic conditions (adult life risk factors, early life biological programming, and life-</li> </ol>				

	<p>course effects).</p> <ol style="list-style-type: none"> <li>5. Describe in detail principles of prevention applicable for tackling major chronic disease epidemics and be able to design preventive programmes for dealing with these in developed and developing countries.</li> <li>6. Describe the phenomenon of emerging infectious diseases, their determinants and the current response approaches.</li> <li>7. Name the main objectives of epidemiological surveillance and distinguish its major types.</li> <li>8. Interpret and explain the characteristics of incubation period, transmission, and communicability of microbes and describe their relationship with the spread of diseases in the population.</li> <li>9. Describe the modes of epidemic initialisation and the types of epidemics.</li> <li>10. Name the main objectives of infectious disease epidemic investigation and describe the steps of an outbreak investigation.</li> <li>11. Demonstrate deep understanding and describe in detail the major epidemiological characteristics of selected major infectious diseases for public health (e.g. HIV/AIDS, tuberculosis, influenza, diarrhoeal disease, malaria) in the developed and developing world.</li> <li>12. Describe in detail the modes of prevention and control of infectious diseases and relevant measures and explain their relevance with the mode of transmission.</li> <li>13. Be familiar with the objectives and the content of the Expanded Program on Immunization (EPI) of the World Health Organization.</li> <li>14. Describe the 'epidemiological profile' of migrants/refugees and the healthy immigrant effect and assess the myths prevailing regarding this specific issue in modern societies.</li> </ol>		
Prerequisites	MPH-511	Required	None
Course Content	<ol style="list-style-type: none"> <li>1. Epidemiology of major chronic conditions I: cardiometabolic and cerebrovascular conditions</li> <li>2. Epidemiology of major chronic conditions II: neoplastic conditions</li> <li>3. Epidemiology of major chronic conditions III: dementia and other neurodegenerative conditions</li> <li>4. Epidemiological paradigms for the aetiology of chronic conditions</li> <li>5. Prevention of the major chronic conditions in developed and developing countries</li> <li>6. Emerging infectious diseases: current understanding</li> <li>7. Epidemiological surveillance: cornerstone for the organization of public health measures at the national and international level</li> <li>8. Special concepts in infectious diseases and spread dynamics</li> <li>9. Infectious disease epidemic investigation</li> <li>10. Epidemiology of major infectious diseases</li> <li>11. Measures for prevention and control of infectious diseases in the developed and developing world</li> </ol>		

	12. Migrant health and infectious diseases: epidemiological data and prevailing perceptions in developed societies				
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	<b>Required Textbooks / Reading:</b>				
	<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
	Sick Societies: Responding to the Global Challenge of Chronic Disease.	Stuckler D, Siegal K	Oxford University Press	2011	978-0199574407
	Chronic Disease Epidemiology and Control (3 <sup>rd</sup> ed.)	Remington LP, Brownson RC, Wegner MV	American Public Health Association	2010	978-0875531922
	Oxford Textbook of Global Public Health (6 <sup>th</sup> ed.) ONLINE	Detels R, Gulliford M, Abdool-Karim Q, Tan CC	Oxford University Press	2015	978-0199661756
	Modern Infectious Disease Epidemiology (3 <sup>rd</sup> ed.)	Giesecke J	CRC Press	2017	978-1444180022
	Infectious Disease Epidemiology: Theory and Practice (3 <sup>rd</sup> ed.)	Nelson KE, Williams C	Jones & Bartlett Learning	2013	978-1449683795
	<b>Recommended Textbooks / Reading:</b>				
	<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>

	Control of Communicable Diseases Manual (20 <sup>th</sup> ed.)	Heymann DL	American Public Health Association	2014	978-087553-0185
	Epidemiology and Prevention of Cardiovascular Disease: A Global Challenge (2 <sup>nd</sup> ed.)	Labarthe DR	Jones & Bartlett Learning	2011	978-076374-6896
	Cancer Epidemiology: Principles and Methods	dos Santos Silva I.	IARC	1998	928320405-0
	The Strategy of preventive medicine	Rose G.	Oxford University Press	1993	019262486-5
	Modern Infectious Disease Epidemiology	Krämer A, Kretzschmar M, Krickeberg K.	Springer	2010	978-038793-8356
	People's Movements in the 21st Century - Risks, Challenges and Benefits	Muenstermann I.	IntechOpen	2017	978-953512-9240
Assessment	Online quiz (formative) Coursework (1 essay and 1 group project) – 40% Final exam – 60%				
Language	English				