

Course Title	Public Health Nutrition				
Course Code	MPH-534				
Course Type	Elective				
Level	2 <sup>nd</sup> Cycle				
Year / Semester	2 / 3				
Teacher's Name	Dr Elena Philippou				
ECTS	10	Lectures	12	Interactive learning activities	23
Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> <li>• Provide a basic understanding of nutritional science, including the major macronutrients and micronutrients, as well as introduce and analyse the concept of Public Health Nutrition.</li> <li>• Cover and explain the main effects of very low (deficiency) and very high (toxicity) intakes of nutrients, as well as introduce and analyse the concepts of dietary recommendations and guidelines at the population level.</li> <li>• Cover and explain in detail the main determinants of dietary choice in populations, as well as the health effects of these at the nutrient, food, and whole diet levels.</li> <li>• Cover and explain in detail the main food-borne diseases, as well as diseases related to over nutrition, undernutrition, and unhealthy dietary choices.</li> <li>• Cover and explain the role of adequate nutrition during pregnancy and the public health effects of lack of it.</li> <li>• Provide students with the skills to conduct nutritional surveillance and assessment in populations and design interventions for improving dietary choices and the nutritional status of populations.</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 of the main principles of nutritional science, including the basic functions of macronutrients and micronutrients.</li> <li>2. Explain the importance of public health nutrition and introduce the principles of public health nutrition, the public health nutrition cycle and the range of options for public health interventions.</li> <li>3. Demonstrate deep understanding and describe the health effects resulting from deficiency and toxicity of specific macronutrients and micronutrients.</li> <li>4. Demonstrate deep understanding and describe the basis and calculation of dietary recommendations and guidelines, including Dietary Reference Values (DRVs), Dietary Reference Intakes (DRIs) and the WHO macronutrient intake recommendations.</li> <li>5. Demonstrate deep understanding and describe different markers of nutritional status in populations.</li> </ol>				

	<ol style="list-style-type: none"> <li>6. Demonstrate deep understanding and describe the social, behavioural, economic and other determinants of dietary choice.</li> <li>7. Demonstrate deep understanding and describe the main short and long term health effects of specific nutrients (e.g. antioxidant vitamins, saturated fat, sodium, etc.), foods (fruits and vegetables, red meat, etc.), and diets as a whole (e.g. Mediterranean Diet, Western Diet, Low-GI diet, etc.).</li> <li>8. Demonstrate deep understanding and describe the main food-borne diseases and related pathogens.</li> <li>9. Describe in detail the main diseases resulting from over-nutrition (including obesity, type 2 diabetes and related co-morbidities) both in developed and developing countries.</li> <li>10. Describe in detail the main diseases resulting from unhealthy dietary choices (including cardiovascular and cerebrovascular diseases and cancer) both in developed and developing countries.</li> <li>11. Describe in detail the main diseases resulting from undernutrition (including marasmus, wasting, and Kwashiorkor) both in developed and developing countries.</li> <li>12. Describe in detail the effects of malnutrition during pregnancy, both in developed and developing countries.</li> <li>13. Demonstrate deep understanding and describe the methods of nutritional surveillance and assessment at the population level and be able to perform these.</li> <li>14. Design multi-disciplinary interventions for improving dietary choices and the nutritional status of populations, as well as evaluation of their impact, both in developing and developed countries.</li> </ol>		
Prerequisites	MPH-511, MPH- 512, MPH- 513, MPH- 521, MPH-523, MPH-531.	Required	None
Course Content	<ol style="list-style-type: none"> <li>1. Introduction to nutritional science: macronutrients and micronutrients</li> <li>2. Dietary deficiency and toxicity</li> <li>3. Dietary recommendations and guidelines at the population level</li> <li>4. Markers of nutritional status in populations</li> <li>5. Determinants of dietary choice in populations</li> <li>6. Health effects of nutrients, foods, and diets</li> <li>7. Major food-borne diseases</li> <li>8. Diseases of over-nutrition and unhealthy dietary choices in developed and developing countries</li> <li>9. Diseases of undernutrition in developed and developing countries</li> <li>10. Malnutrition during pregnancy and the public health effects in developed and developing countries</li> <li>11. Nutritional surveillance and assessment at the population level</li> <li>12. Designing and evaluating interventions for improving dietary choices and the nutritional status of populations</li> </ol>		

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>
	Public Health Nutrition	Buttriss JL, Welch AA, Keanery JM, Lanham-New SA	Wiley Blackwell	2018	978-1-118-66097-3
	Community Nutrition – Planning Health Promotion and Disease Prevention	Nnakwe N	Jones and Bartlett Learning	2018	978-1-2841-0832-3
	Public Health Nutrition- Principles and Practice in Community and Global Health	Stein N	Jones and Bartlett Learning	2015	978-1-4496-9204-9
	<b>Recommended Textbooks / Reading:</b>				
	<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
Nutrition for Developing Countries (3 <sup>rd</sup> ed.)	Savage King F, Burgess A, Quinn VJ, Osei AK	Oxford University Press	2015	978-0199685226	
Introduction to Human Nutrition (3 <sup>rd</sup> ed.)	Lanham-New SA, Hill TR, Gallagher AM, Vorster HH	Wiley-Blackwell	2019	978-1-119-47697-9	

	Nutritional Epidemiology (3 <sup>rd</sup> ed.)	Willett WC	Oxford University Press	2012	978-0199754038
	Nutrition in Public Health: Principles, Policies, and Practice (2 <sup>nd</sup> ed.)	Spark A, Dinour LM, Obenchain J.	CRC Press	2015	978-1466589940
Assessment	<p>Online quiz (formative)</p> <p>Coursework (1 essay, 1 mini project on an important current public health nutrition topic) – 30%</p> <p>Mandatory interactive activities and webinar attendance/participation – 10%</p> <p>Final Exam – 60%</p>				
Language	English				