## **Programme Overview**

Public Health refers to all organised measures aimed at preventing disease, promoting health and prolonging healthy life. Its aim is to ensure a high standard of living and well-being for individuals and societies globally.

The University of Nicosia's Master of Public Health (MPH) programme covers the main domains of Public Health Practice (Health Protection, Health Improvement, Health Services Provision) and offers the opportunity to specialise in a broad range of public health topics. The programme places a strong emphasis on global aspects of public health, like the epidemiology and prevention of both non-communicable and infectious conditions. There is a focus on important public health issues in both developed and developing countries for preparedness in disaster risk reduction, prevention, response and recovery.

The curriculum is based on a dynamic approach, with continuous updating to address new and emerging issues threatening population health: climate change, armed conflict, forced migration, pandemics and more. This programme has been carefully designed according to the standards of the UK Faculty of Public Health.

A unique feature of our MPH programme is its international orientation: the programme is part of a Medical School with faculty, teaching hospitals and students from across the globe.

The Faculty of Public Health Diplomate Examination (DFPH)
The MPH programme curriculum has been designed with the DFPH (formely the Part A exam) in mind, and the learning outcomes correlate to a large extent with those of that exam.

Students who pass the DFPH exam are demonstrating a professional level of knowledge and understanding of the scientific basis of public health. Success in the DFPH leads to election into Diplomate Membership of the Faculty of Public Health.

### **Student Outcomes**

Thanks to our exciting approach to learning, with a curriculum constantly updated to focus on new issues in global public health, graduates are prepared to tackle real-world challenges. Upon graduation, they will be ready to work in the public sector at local, national and international health agencies. This course has provided our alumni with greater opportunities in non-governmental organisations, charities as well as private sector career work in consulting firms, pharmaceutical industry, start-ups and policy research. With the ability to specialise during your studies, students have multiple pathways for success. The strong emphasis on innovation and technological advancements enables graduates to provide vision and initiate strategic change in healthcare organisations.

## Programme's aims and objectives

The main aims of the programme are to enable students to:

 Enhance the necessary knowledge and skills for conducting and critically evaluating research relevant to Public Health.

- Develop a comprehensive, holistic and evidence-based approach to Public Health.
- Develop the skills and critical thinking for practicing health protection, health promotion, and disease prevention for the major non-communicable and infectious conditions affecting the developed and the developing world.
- Develop the necessary knowledge and skills for identifying and tackling environmental threads to population health, including emergency response, recovery and rehabilitation in the context of disasters, as well as occupational hazards and their prevention and management.
- Develop the necessary knowledge and skills for applying the principles of health economics for prioritizing, devising, and evaluating cost-effective health services and systems in different settings, both nationally and globally.
- Develop the necessary skills and confidence to assess needs, conduct, and disseminate (through scientific papers and oral presentations) high quality research relevant to Public Health.

#### The specific objectives of the programme are to:

- Introduce and analyse the major principles of Epidemiology and Public Health, with emphasis
  on studying the frequency, distribution, determinants, and prevention of disease in
  populations.
- Provide students with the necessary knowledge and skills to assess the needs, design, analyse, interpret, and critically evaluate quantitative (epidemiological) and qualitative research studies relevant to Public Health.
- Provide students with the necessary critical thinking, practical skills, and confidence to perform appropriate statistical analysis for conducting epidemiological research, using a statistical software package.
- Introduce and analyse Health Protection and Health Promotion, covering and explaining the methodology used for protecting the public from infectious agents and environmental hazards, as well as the methodology used for preventing disease and improving health in populations.
- Provide students with in depth knowledge on the epidemiology of the major chronic and infectious conditions causing the biggest burden on developed and developing societies, as well as regional, national and global preventive initiatives for tackling these.
- Cover in detail the distal and proximal environmental determinants of health and the response to environmental emergencies and disasters, as well as occupational hazards, including methods and systems for prevention, risk management, incident investigation, and monitoring at the workplace
- Introduce students to the major principles of health economics and equip students with the knowledge and skills to perform a clinical audit, as well as design and evaluate cost-effective health services and systems, in a global context.
- Provide the opportunity to actively engage in public health research by writing up a research grant proposal including a bioethics application and conducting their own epidemiological study, leading to the write up of a scientific article at the standards of a peer-reviewed publication to a relevant international Journal, as well as an oral presentation.
- Provide the opportunity to study in depth specific aspects of Public Health such as
  environmental and occupational health, health inequality within and between countries,
  population ageing and health, public health nutrition, social and behavioural, as well ethical
  dimensions of Public Health

## **Intended learning outcomes**

#### Graduates of the MPH programme will:

- 1. Apply measures of descriptive and analytic epidemiology used to assess the frequency, distribution and determinants of disease in human populations.
- 2. Apply the different study designs in epidemiological research and be able to design their own epidemiological studies for answering research questions relevant to Public Health.
- 3. Critically evaluate concepts pertaining to internal study validity (random error, bias, confounding) and external study validity (generalizability)

- 4. Explain the importance of systematic reviews and meta-analyses in Public Health and be able to interpret these for answering research questions relevant to Public Health.
- 5. Differentiate between association and causation, as well as critically evaluate the importance of their distinction in Public Health Policy
- 6. Apply the different levels of prevention and be able to design their own preventive measures for tackling current Public Health challenges.
- 7. Evaluate the aims, objectives, and responsibilities of the World Health Organization and its leadership priorities, as well as the health-related UN Sustainable Development Goals.
- 8. Manage the different types of data involved in epidemiological research and be able to appropriately choose the right statistical method for analysing these.
- 9. Apply the basic principles or probability, random error, statistical significance, study power, Type I and Type II errors
- 10. Use the statistical software programme STATA to load, clean, modify, manage and perform descriptive and inferential statistical analysis, with the appropriate results interpretation.
- 11. Analyse the principles and detailed methodologies of Health Protection, as well as describe and explain how they relate to protecting the public from infectious agents and environmental hazards
- 12. Analyse the principles and detailed methodologies of Health Promotion, as well as describe and explain how they relate to preventing disease and improving health in populations through individualistic and wider environmental approaches.
- 13. Apply models of predicting and explaining health behaviour in groups of people and use these for developing and implementing health promotion programmes.
- 14. Describe current and emerging pandemics and the global network of organizations, agencies and initiatives aiming at tackling these.
- 15. Describe in detail the epidemiology of the major non-communicable and infectious conditions causing the biggest burden on developed and developing societies and critically evaluate national and international preventive initiatives aiming at tackling these.
- 16. Analyse the different epidemiological paradigms for the aetiology of non-communicable conditions, as well as major and emerging and re-emerging infectious conditions in developed and developing societies.
- 17. Analyse the dynamics of infectious disease outbreak and describe measures of control and surveillance
- 18. 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.
- 19. Analyse the principles of immunization and the basic methodologies involved in the design of such programmes, also highlighting the phenomenon of vaccine hesitancy.
- 20. Describe in detail the effects of climate change, global warming, air pollution, toxic hazards, water pollution, electromagnetic radiation, noise pollution, poor housing conditions, poor sanitation, as well as environmental emergencies and disasters in population health both in the developed and the developing world.
- 21. Analyse the main factors affecting health and safety at the workplace and describe in detail the control of substances hazardous to health, including methods and systems for preventing workplace injuries, as well as risk management, incident investigation, and monitoring at the workplace.
- 22. Analyse how the lack of resources during periods of economic crisis, recession, and austerity may affect population health and influence the prioritization and strategic planning as regards public health policies.
- 23. Apply the major principles of health economics and analyse the different methods for pricing and reimbursing health care services, assessing health service needs and prioritizing in the context of justice and equity in health care provision
- 24. Analyse methods for assessing utilization and performance of health services and healthcare, as well as economic appraisal (incl. cost-effectiveness, cost-utility, and cost-benefit analysis) and apply these for designing and evaluating cost-effective health services and systems, as well as clinical audits.
- 25. Critically evaluate different healthcare systems around the world highlighting the main characteristics, strengths, and limitations of each and use this experience for designing effective and efficient health services and systems.

# **Programme Structure**

The programme is divided into three semesters, comprising three or four courses each (5-10 ECTS per course). Core courses are taught in semesters 1 and 2 and are compulsory. After completing the core programme, students have the opportunity to choose one of two paths in semester 3. In the electives path, students have to take Research Methodology in Public Health (MPH-590) and choose two (out of six) elective courses. Alternatively, students can choose to follow a more research-oriented path by selecting Research Methodology in Public Health (MPH-590) and Research Project (MPH-596), where they will be expected to engage in research by performing their own study on a relevant public health topic.

### Semester Breakdown

The following programme structure is based on prospective delivery from 2024-2025. The programme is subject to continuous evaluation and improvement, in consultation with students and lecturers, and in accordance with the regulations and guidelines of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, and therefore may be subject to additional changes.

Course code/Title	Description
<u>MPH-511</u>	Principles of Epidemiology and Public Health
<u>MPH-514</u>	Health Protection: Safeguarding Wellbeing in Populations
<u>MPH-515</u>	Health Promotion: Maintaining Wellbeing in Populations
MPH-521	Epidemiology and Prevention of Non-communicable and Infectious Diseases in a Global Context

Course code/Title	Description
MPH-512	Applied Statistics for Epidemiology and Public Health
<u>MPH-522</u>	Health Policy, Management and Leadership
MPH-523	Health Economics in the Context of Health Services and Systems: Global Perspectives

### Option 1

Course code/Title	Description
<u>MPH-590</u>	Research Methodology in Public Health (Required)
<u>MPH-596</u>	Master's Thesis (Research Project) (Required)
Option 2	
Course code/Title	Description
<u>MPH-590</u>	Research Methodology in Public Health (Required)
	Plus two elective courses from the following:
MPH-531	Environmental and Occupational Health
MPH-532	Health Inequality within and between countries
MPH-533	Population Ageing and Health
MPH-534	Public Health Nutrition
MPH-535	Social and Behavioural Dimensions of Health
MPH-536	Ethical and Legal Dimensions of Public Health

<sup>\*</sup>Students should note that the availability of each of the elective courses offered in a given academic year will be based on student numbers