

## Course Description

**EH 201 Principles and Methods of Environmental Health.** Environmental health practice in relation to the prevention and control of diseases.

**EH 202 Environmental Health Practice.** Problems of water supply and waste disposal, milk and food sanitation, solid waste management, control of vectors of diseases, atmospheric pollution control, radiological health, housing and emergency sanitation. Practice is provided in conducting community sanitary surveys and inspection.

**EH 204 Instrumental Methods of Chemical Analysis.** Principles of instrumental techniques for chemical analysis of environmental samples (air, water, sediment, etc.).

**EH 205 Biological Aspects of Water Supply and Water Pollution.** The role of biological processes in taste and odor production in water, natural purification of streams, in sewage and industrial waste treatment processes. Practice is provided in biological water quality testing including recognition of important species of algae and protozoa in water.

**EH 207 Fundamentals of Environmental Toxicology.** Elements in the transport and fate of toxic substances in environmental compartments and the mechanisms of human exposure to these toxicants.

**EH 208 Air Pollution Epidemiology.** Application of epidemiological principles and methods for determining effects of air pollution on human health.

**EH 211 Hazardous and Toxic Waste Management.** Strategies and approaches to waste management, identification of health hazards associated with improper disposal of waste and their control.

**EH 212 Introduction to Environmental Health Impact Assessment.** Principles, concepts, and strategies of health impact assessment.

**EH 214 Environmental Health Service for Emergencies.** Planning and management of environmental health services for disasters.

**EH 215 Environmental Health Policy.** Elements, processes and approaches in the development of environmental health policy.

**EH 216 Introduction to Environmental Health Economics.** Principles and methods in the economic valuation of environmental pollution.

**Biostat 201 Fundamentals of Biostatistics I.** Collection, presentation and elementary analysis of data.

**Epi 201 Principles of Epidemiology.** Ecology of human diseases and epidemiologic methods.

**OH 203 Industrial Toxicology.** Entry, action and elimination or detoxification of toxic substances. Design of toxicity experiments, dose and effect relationships. Toxicity of chemicals.

**OH 204 Environmental Physiology.** Physiological responses of man to various stresses in the environment.

**OH 205 Environmental Pollution.** Causes and effects of pollution.

**OH 207 Health Maintenance in the Workplace.** Health surveillance, health promotion and maintenance in a workplace.

**OH 211 Industrial Safety.** Fundamentals and principles of safety in industry.

**PH 201 Man, Health and the Environment I.** The dynamic interrelationships between man and the environment as these affect health.

**PH 205 Environmental Epidemiology.** Principles and methods of epidemiology applied in the identification and prevention of environmental problems.

**PH 206 Occupational Epidemiology.** Epidemiologic principles and methods to assess health risks at the workplace

**Biostat 206 Research Methods I.** Principles of field investigation; sampling methods in the study of health problems of human populations.

**HPAd 201 Principles of Health Administration.** Theoretical framework in planning and managing the health system.

## Faculty Profile

### DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH

Professor

**Romeo R. Quizon, MSc Eng'g, FPSSE, ASEAN Eng**  
**Victorio B. Molina, MPH, PhD**

Associate Professors

**Vivien Fe F. Fadrilan-Camacho, MD, MPH, FPAFP**  
**Crystal Amiel M. Estrada, RMT, MPH, PhD**  
**Paul Michael R. Hernandez, MD, MOH**  
**Marian Fe Theresa C. Lomboy, MSc**

Assistant Professors

**Gayline F. Manalang Jr., PTRP, MOH**  
**Rose Abigail D. Enoveso, RMT, MSPH**

Instructor

**Harvey C. Domingo, PTRP**

*Application forms may be obtained from and mailed/returned to:*

**THE DIRECTOR**

**National Graduate Office for the Health Sciences**

Tel Nos.: (+632)8526-5870, (+632)8523-1495

Telefax: 8523-1498

Email: [upm-ngohs@up.edu.ph](mailto:upm-ngohs@up.edu.ph), [ngohs@post.upm.edu.ph](mailto:ngohs@post.upm.edu.ph)

Website: [ngohs.upm.edu.ph](http://ngohs.upm.edu.ph)

*Further inquiries may be sent to:*

**THE MSPH (ENVIRONMENTAL HEALTH)  
PROGRAM COORDINATOR**

**College of Public Health**

**University of the Philippines Manila**

625 Pedro Gil St., Ermita, Manila 1000 or

P.O. Box EA-460, Manila 1000 Philippines

Tel. No.: (+632)8524-7102; Fax No.: (+632)8523-7745

COLLEGE OF PUBLIC HEALTH  
University of the Philippines Manila  
The Health Sciences Center



**Master of Science in  
Public Health  
(Environmental Health)**

**SEAMEO TROPED**  
Regional Centre for Public Health,  
Hospital Administration,  
Environmental and Occupational Health

## Rationale and Objectives

The country is presently experiencing a rapid transition to industrialization and urbanization which brings about several environmental resource and health problems. Among these are deaths attributed to inadequate water supply and poor sanitation and hygiene practices; chronic diseases brought about by the contamination of air, water and food; and, general degradation of the environment by indiscriminate disposal of wastes, erosion of soil, deforestation, siltation of bodies of water and formation of urban slums. Poor appreciation of the interaction among development, environment and health must be addressed by training environmental professionals who will be able to influence environmental health policies of the country through education, research, community service, and advocacy.

The MSPH (Environmental Health) program is designed to provide this area of specialization in Public Health. Graduates of the program are expected to make substantive contribution to new knowledge that is relevant to the environmental health needs of developing countries. Specifically, at the end of the program, the MSPH (EH) graduates should be able to:

- Design, implement, and evaluate public health programs;
- Design, implement, and use research findings for policy development and institution building;
- Employ statistical techniques in analyzing and interpreting public health and medical data;
- Provide technical services related to environmental health;
- Select appropriate laboratory procedures for the determination of environmental health concerns;
- Implement appropriate health promotion and education strategies in addressing public health issues;
- Practice inter-professional collaboration in public health service while adhering to professional, social, and ethical standards;
- Effectively use Filipino and English communication skills in both oral and written form; and
- Exemplify positive Filipino values (e.g. *damayan*, *bayanihan*, hospitality, compassion) in the conduct of public health practice.

## General Information

- The academic year is divided into 2 semesters of 16 weeks each, and a short term with only 6 weeks
  - ☐ First semester : August - December
  - ☐ Second semester: January - May
  - ☐ Short term: June - July
- The medium of instruction is English.
- The usual academic load of full - time students is 12 - 15 units.
- The tuition fee is Php 990.00 per unit and the miscellaneous fees amount to approximately Php 1,360 per semester.
- International students must pay an Educational Development Fund of US \$ 500.00 (or US \$ 100.00 for residency) per semester.
- Application Fee : Php 300.00 for Filipinos  
US \$ 30.00 for international students

\* Fees subject to change without prior notice

## Admission Requirements

1. Must fulfill the general admission requirements of the National Graduate Office of UP Manila.
2. Good scholastic record from any recognized institution of higher learning.
3. Must be graduates of approved schools of medicine and/or allied professions or have at least a baccalaureate degree in the biological sciences.
4. Approval of the applicant's qualification for graduate work in the MSPH (Biostatistics) by the faculty of the Department of Environmental and Occupational Health

## Graduation Requirements

1. Residence of at least on full academic year immediately prior to granting of the degree
2. Completion of a minimum of 40 units (6 units of core, 12 units of major, 6 units of other required courses, 10 units of electives/cognates)
3. General Weighted Average of "2.00" or better in major courses and in all courses taken provided there is no grade of "5.0" in any subject
4. Satisfactory completion and submission of 6 bound copies of a masters' thesis
5. Submission of publishable form of the masters' thesis

## Residence Requirements and Time Limit

- Minimum residence required: 2 semesters and 1 short term
- Maximum residence rule (MRR): 5 calendar years including official leaves of absence
- If the MRR is exceeded, further extension of not more than 1 year shall be allowed subject to the recommendation of MSPH Program Committee and approval of the Chancellor

## The Curriculum

Core Courses		6	Units
Biostat 201	Fundamentals of Biostatistics I		3
Epi 201	Principles of Epidemiology		3
Major Courses		12	
EH 201	Principles and Methods of Environmental Health		2
EH 202	Environmental Health Practice		2
OH 204	Environmental Physiology		2
PH 205	Environmental Epidemiology		2
EH 207	Fundamentals of Environmental Toxicology		2
EH 215	Environmental Health Policy		1
EH 297	Seminar on Environmental Health		1
Other Required Courses		6	
PH 201	Man, Health and Environment I		2
Biostat 206	Research Methods		2
HPAd 201	Principles of Health Administration		2
Electives <sup>a</sup> /Cognates <sup>b</sup>		10	Units
EH 203	Chemistry of Water and Wastewater		2
EH 204	Instrumental Methods and Chemical Analysis		2
EH 205	Biological Aspects of Water Supply and Water Pollution		2
EH 208	Air Pollution Epidemiology		2
EH 209	Radiological Health		2
EH 210	Hospital Sanitation and Safety		2
EH 211	Hazardous and Toxic Waste Management		2
EH 212	Introduction to Environmental Health Impact Assessment		2
EH 214	Environmental Health Service for Emergencies		1
EH 216	Introduction to Environmental Economics		1
EH 299	Special Studies and Research		3
OH 201	Principles and Methods of Occupational Health		2
OH 203	Industrial Toxicology		2
OH 211	Industrial Safety		2
OH 205	Environmental Pollution		1
OH 207	Health Maintenance in Industry		1
PH 206	Occupational Epidemiology		2
Thesis		6	
EH 300.1	Masters' Thesis		6
EH 300.2			
		<b>TOTAL</b>	<b>40</b>

<sup>a</sup>elective courses may be chosen from the list given above

<sup>b</sup>other courses that are related to the field of specialization may be taken from other departments of CPH or any unit in UP