



MANIPAL
UNIVERSITY

Global and Public Health

PUBH 210: *Environmental and Occupational Health*

Please refer to the [faculty page](#) for this semester's instructor.

Course Description

This course examines the importance of ecological conditions in promoting health and preventing disease.

Learning Objectives

By the end of this course, students will have a greater understanding of the concepts of hygiene and sanitation, the purpose of environmental health and ergonomics, various environmental and occupational hazards, and legislation related to occupational health.

Course Schedule

Session 01/10 Introduction

- The purpose of environment health
- Define the components of environment: physical, biological and social
- Health, hygiene and sanitation

Session 02/10 Water and health

- Safe and wholesome water
- Purification of water
- Hazards of water pollution
- Water pollution law
- Water quality criteria and standards
- Surveillance of drinking water quality

Session 03/10 Air pollution and health

- Indices of thermal comfort
- Indicators of air pollution

- Air pollution monitoring in India
 - Prevention and control of air pollution
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Session 04/10 Effects of Radiation

- Types of radiation
 - Radiation hazards
 - Radiation protection
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Session 05/10 Disposal of wastes

- Solid waste management
 - Methods of waste disposal
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Session 06/10 Medical Entomology

- Arthropods of medical importance
 - Arthropod-borne diseases
 - Arthropod control measures
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Session 07/10 Ergonomics

- Understand the concept of ergonomics
 - Applications of ergonomics
 - Occupational health in India
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Session 08/10 Occupational hazards

- Types of hazard
 - Occupational diseases
 - Occupational cancer
 - Accidents in Industry
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Session 09/10 Health Problems due to Industrialization

- Various health problems
 - Sickness absenteeism
 - Measures for health protection of workers
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Session 10/10 Prevention of occupational diseases

- Medical measures for prevention of occupational diseases
- Engineering measures for prevention of occupational diseases
- Legislation related to occupational health:
 - Indian factories act
 - Employee's state insurance act

Texts

Friis, R. H. (2012). *Essentials of Environmental Health (2nd Edition)*. Jones & Bartlett Learning.

Levy, B. S. et al. *Occupational and Environmental Health: Recognizing and Preventing Diseases and Injury*. Oxford University Press.

Park, K. (2013). *Park's Textbook of Preventative and Social Medicine*. 22st edition. Jabalpur, India: Banarsidas Bhanot Publishers.

Grading

Alliance programs utilize the following standard grading policy well accepted by most US institutions.

Excellent	A	93-100%	Good	B+	87-89%	Acceptable	C+	77-79%
	A-	90-92%		B	83-86%		C	73-76%
				B-	80-82%		C-	70-72%
						Unsatisfactory	D+	67-69%
							D	63-66%
							D-	60-62%
						Failing	F	<60%

Course Policies

Exams and Assignments

Students are required to take all regularly scheduled exams in courses for which they are registered, and to submit all assignments on time. Any compelling academic, personal, or medical reason that might justify a rescheduled exam or assignment must be brought up to both the Resident Director and program faculty. Failure to take scheduled exams or submit the requisite assignments for a course will adversely affect your grade as per the stated grading criteria for each course.

Classroom Conduct

Student punctuality is extremely important in China and India. Please do not be late for classes or other activities, as it is considered impolite to do so. It is improper to eat in class, to engage in other activities such as texting, or to slump or nap. Students are expected to be alert and engaged as a sign of respect for their professors.

Attendance

Class attendance is mandatory. It is essential that the students participate fully in the coursework and all required academic activities. Authorized absences may only be approved by the Resident Director, and students are expected to make up any missed work. Unauthorized absences will adversely affect a student's grades.