

NATIONAL EDUCATION POLICY

# FYUGP REGULATIONS-2022

B.A/B.COM/BBA/B.SC/BCA 4 –YEAR UNDERGRADUATE PROGRAM FYUGP WITH SINGLE MAJOR UNDER THE NEW CURRICULUM AND CREDIT FRAMEWOK, 2022

MULTIDISCIPLINARY COURSES (MDC)  
GLOBAL ENVIRONMENT AND HEALTH



समानो मन्त्रः समितिः समानी

**UNIVERSITY OF NORTH BENGAL**

RAJA RAMMOHUNPUR, P.O.-N.B.U; DISTRICT- DARJEELING, PIN-734013, WEST BENGAL, INDIA

Course Code	Course Name	Lectures/Tutorials Nos.	Credits	Marks		
				Theory	Mid-Semester Exams & Assignment	Attendance
	Global Environment and Health	45	3	75	10	05

### Course Description:

Global Environment and Health is an interdisciplinary course focused on the science and practice of preventing injury and illness due to exposure to pollution and hazards in our environments. This course interprets the relationship between the environment and human health. It appraises the major groups of environmental contaminants and different causative agents of diseases as well as different media and pathways (air, water, food, and occupational) of exposure to diseases are being discussed. This course also focuses on various global climatic changes and their adverse impact on human health. Important legislative policies and initiatives associated with Environmental Health to Improve Public Health is also discussed.

### Course Outcomes:

After completing this course, the student will be able to:

1. Apply the basic concepts and relationship between environment and human health issues.
2. Interpret in appropriate biological, chemical and physical terms the potential consequences of exposure to hazardous environmental/ occupational agents.
3. Develop skills in analyzing, sensitizing and managing the community about environmental health issues.
4. Diagnose the cause of environmental pollution and plan appropriate control measures to improve the health problem.
5. Develop an arbitrary plan of action to improve the solid waste disposal methods in urban and rural context.

**Unit I - Relationship between Environment and Health:**

**8-Lectures**

***Understanding relationship between Environment and Health:*** Introduction to Environment and Health, Determinants of Health, Perspective on Individual health: Nutritional, socio-cultural and developmental aspects. Dietary diversity for good health; Human developmental indices for public health.

**Unit II - Environmental pollution and consequences on Public Health: 12 Lectures**

***Effect of water pollution:*** Sources of water pollution, Classification of Water Borne Diseases according to Causative Agents, Effect on Human Health.

***Effect of air pollution:*** sources of air pollution, Human habitation and Air Pollution; Indoor Air Pollution-Sources and effect on human health.

***Effects of Biological, Chemical, and Physical agents in Food Resources:*** types of food-borne diseases- infectious and chemical contamination.

***Effects of land/soil pollution:*** source, effect on human health. Prevention and control of diseases.

**Unit III - Climate Change and consequences on Public Health**

**10-Lectures**

Global warming, Acid rain and ozone layer depletion - Burning of fossil fuels, automobile emissions, use of synthetic chemicals loss of green cover. Agricultural practices (chemical agriculture) and Industrial technologies (use of non-biodegradable materials like plastics, aerosols, refrigerants, pesticides). Prevention and control of diseases.

**Unit IV – Diseases in Modern Society**

**8-Lectures**

Definition, need for good health, factors affecting health.

Types of diseases - deficiency, infection, pollution diseases- allergies, respiratory, cardiovascular, and cancer. Personal hygiene, food and balanced diet. Food habits and cleanliness, food adulterants, implications of smoking, drugs and alcohol.

***Communicable diseases:*** Mode of transmission -epidemic, endemic and pandemic diseases. Infectious diseases: Role of sanitation and poverty. Case studies on TB,

diarrhea, malaria, COVID and other viral diseases.

***Non-communicable diseases:*** Role of lifestyle and built environment. Diabetes and Hypertension.

***Occupational health hazards:*** physical, chemical and biological. Occupational diseases-prevention and control.

**Unit V - Legislative Policies and initiatives associated with Environmental Health to Improve Public Health** **7- Lectures**

***Health Sectors in India, Role of Government of India in Preservation and Promotion of Public Health:*** Health Mission, Landmark Health Policies, Plans and Program in India.

Policies and practices with respect to Environmental Protection Act, Forest Conservation Act, Wild life protection Act, Water and Air Act, Industrial, Biomedical and E-waste disposal rules.

Global Burden of disease and surveillance; Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH); Universal Immunization Programme (UIP); Reproductive health-Youth Unite for Victory on AIDS (YUVA) programme of Government of India.

**References**

1. Lakshminarayanan S. (2011). Role of government in public health: Current scenario in India and future scope. Journal of family & community medicine.
2. Kumar, G. S., Kar, S. S., & Jain, A. (2011). Health and environmental sanitation in India: Issues for prioritizing control strategies. Indian journal of occupational and environmental medicine.
3. <https://www.healthandenvironment.org/environmental-health/environmental-risks/global-environment>
4. Public Health Nutrition in Developing Countries (Part-2). Wood head Publishing India
5. Aakriti Grover, R.B. Singh, (2019). Urban Health and Wellbeing- Indian Case Studies
6. R K Mutatkar, 2017, Ayush in Public Health

**E-resources:**

1. [www.traditionalmedicine.nic.in](http://www.traditionalmedicine.nic.in)
2. [www.moef.nic.in](http://www.moef.nic.in)
3. [www.iucn.org/india/](http://www.iucn.org/india/)
4. [www.who.int](http://www.who.int)
5. [www.wwfindia.org](http://www.wwfindia.org)
6. [www.unep.org](http://www.unep.org)