

IUBAT— International University of Business Agriculture and Technology

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*Founded 1991 by Md. Alimullah Miyan*

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**Curriculum of  
Master of Public Health (MPH) Program**

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## **Master of Public Health (MPH)**

### **College of Health Sciences and Medical Education**

#### **Vision of the University**

IUBAT has a long-term vision of producing at least one professional graduate from each village/ward/moholla of Bangladesh to contribute towards creation of a knowledge-based society.

#### **Mission of the University**

The overall mission of IUBAT is human resources development through appropriate teaching, training and guidance as well as creation of knowledge conducive to socio-agro-economic development of developing countries in general and that of Bangladesh in particular. This overall mission is being attained through offering degrees, diplomas, certificates and other courses and curricula relating to various aspects of knowledge as well as providing opportunities for individuals to acquire skill and relevant experience in the chosen field of specialization.

**Name of the Degree:** Master of Public Health (MPH)

**Name of the Faculty offering the program:** College of Health Sciences and Medical Education

**Name of the Department offering the program:** Department of Public Health.

**Vision of the Program:** The vision of the MPH Program is to meet evolving population health needs at home and abroad.

#### **Mission of the Program**

The mission of the MPH program is to:

- Educate students to become public health professionals with a high standard of professional competencies so that they will be capable of resolving public health issues by working with multidisciplinary teams at home and abroad to improve the quality and effectiveness of community- and institution-based health care services.
- Conduct applied public health research to develop, promote and influence evidence-based policy, program and practice in collaboration with government and development organizations, community organizations as well as national and international academic institutions.

#### **Aim of the program**

This MPH program aims to develop graduates' competencies in the core areas of public health to meet existing and new population health needs at home and abroad.

#### **Objectives of the Program**

The prime objectives of the MPH program are to develop competent public health professionals who:

- 1) Possess an up-to-date knowledge base and expertise in assessing, analyzing, evaluating and communicating the wide range of public health issues prevailing in the community, and
- 2) Are able to formulate, design and implement appropriate health programs, policies and strategies responsive to evolving health care needs at home and abroad.
- 3) Demonstrate population-focused public health competencies to perform as effective and efficient managers, leaders, and administrators in health care related organizations both in government and non-government sectors.
- 4) Apply critical thinking and inter-disciplinary skills to solve complex public health problems at home and abroad.

### **Program Description**

The Masters of Public Health (MPH) Program at IUBAT is a broad-based degree awarding program that complies with national and international standards. This program has been approved by the University Grants Commission, Bangladesh. The program content affirms the goals of the National Health Policy 2011 (NHP), Bangladesh, National Urban Health Strategy 2014 and contributes to achieving Sustainable Development Goals (SDG).

Graduates of the IUBAT MPH program will complete 18 courses totaling 60 credits in about 20 months (5 semesters), including 4 months practicum/internship and research work. The Program offers options so that students may choose either a General Track or various Specialization Tracks. The general track comprises 12 core courses, 4 elective courses of choice, 1 core course for a dissertation/capstone project and 1 core course for a practicum/internship. The Specialization Track offers the following areas:

1. Epidemiology
2. Hospital Management
3. Health Education, Communication and Promotion
4. Public Health Nutrition
5. Occupational and Environmental Health
6. Public Health Dentistry

For specialization, a student must complete all the core courses and elective courses prescribed for that chosen area of specialization. A specialization area will be available only when sufficient students have enrolled in that area.

The MPH Dissertation/Capstone Project is an opportunity for students to work on public health projects that are of interest to them. The goal for students is to synthesize, integrate and apply the skills and competencies they have acquired throughout the entire MPH program with intellectual inputs and rigor.

The MPH practicum/internship will be a hands on experience where students will be affiliated with government department, hospital, NGO, public health organization or in the community and will learn about the key public health issues and how programs are developed, implemented or evaluated.

**The IUBAT MPH provides an outcome-oriented approach** to strengthen students' competencies to work in the field of public health at home and abroad. The course accepts students from a wide range of backgrounds preferably healthcare, community development, social science, quantitative science and environmental protection, but will also include graduates from related disciplines. Applicants with a minimum one-year professional experience with the government, private or non-government organizations will have a preference. However, applicants with an undergraduate degree in health sciences such as MBBS, BDS, B.Pharm, BPT, BScN, etc., are encouraged to apply.

Graduates from this program can substantially contribute and add value to policy planning and intervention, public health services, hospital and healthcare organization management, education, research, communication and advocacy at the national and international level. Graduates can work for government and non-government organizations, international agencies, the private sector and as independent consultants.

**Program Educational Objectives (PEOs)**

The MPH graduates are expected to achieve the following Educational Objectives:

1. Access, analyze and interpret health, environmental, socio-economic, and demographic data to evaluate factors that determine the health of a community
2. Describe the distribution and determinants of illness, injury, disability, and death in human populations.
3. Analyze the planning, organization, administration, and policies of health care organizations and illustrate professional approaches based on evidence, population diversity, cultural shift and then accordingly plan to undertake research, innovation and entrepreneurship activities.
4. Apply the concepts and methods of ethical practice, social justice, legal framework and social and behavioral sciences in solving public health problems.
5. Apply Information Communication Technology (ICTs) skills including use of digital and social media in promoting public health
6. Contribute to social development at home and abroad as members or leaders of multi-disciplinary teams in all areas of public health including management, education, research, communication and advocacy.

**Program Learning Outcomes (PLO)**

All students of the MPH program shall achieve the following learning outcomes and shall be able to:

1	<b>PLO1</b>	<b>Public health sciences:</b> Demonstrate and apply key knowledge and critical thinking skills related to the public health sciences including behavioural and social sciences, biostatistics, epidemiology, environmental and occupational health, demography and on prevention of chronic diseases, infectious diseases, psychosocial problems and injuries.
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2	<b>LO2</b>	<b>Assessment and analysis:</b> Assess, analyze and apply information (data, concepts and theories) to make evidence-based decisions, prepare budgets and reports, conduct investigations and make recommendations for health policy and program development.
3	<b>LO3</b>	<b>Policy and program planning, implementation and evaluation:</b> Demonstrate ability to choose among options, and to plan, implement and evaluate policies and programs in public health, including management of outbreaks and emergencies.
4	<b>LO4</b>	<b>Partnerships, collaboration, and advocacy:</b> Use professional influence and collaborate with others by speaking, writing, listening, interpreting or acting in favour of a particular cause, policy or group to improve the health and well-being of the public, thereby achieving a common goal.
5	<b>LO5</b>	<b>Diversity:</b> Develop and apply the socio-cultural competencies to interact effectively with diverse individuals, groups and communities; embody attitudes and practices that result in inclusive behaviours in delivering health programs
6	<b>LO6</b>	<b>Communication:</b> Use numerous dimensions of communication-internal and external; acquire and apply written, verbal, non-verbal and listening skills; develop computer literacy; receive and provide appropriate information from and to different audiences; work with the media and apply social marketing techniques.
7	<b>LO7</b>	<b>Leadership:</b> Demonstrate leadership that help build capacity, improve performance and enhance the quality of the working environment.
<p>These PLOs are primarily based (and modified) on the <u>Core Competencies for Public Health Education in Canada</u>. The PLOS will be applied at a level appropriate for front-line workers, namely MPH graduates with limited employment experience in the field of public health.</p>		

## Course Structure of the MPH Program

### Course Distribution

Master of Public Health (MPH) program has been designed for graduates to work in the field of Public Health with high standard of professional competencies. The MPH program will consist of a 60 Credits course with in a span of 20 Months and comprises 5 Semesters. The course work is divided into theoretical and practical sessions. In addition to course work, successful completion of Dissertation/Capstone Project work and Practicum/Internship is a pre-requisite for awarding the MPH degree. The program offers six major courses/areas out of which students are obliged to take at least one. The distribution of 60 Credits for the MPH Program are outlined below:

SL #	Name of the course	Number of courses	Total Credit
1	Core Courses (Theoretical)	12	36

2	Elective courses	4	12
3	Dissertation/Capstone Project (Theoretical and Practical)	1	6
4	Practicum/Internship (Practical)	1	6
	<b>Total</b>	<b>18</b>	<b>60</b>

### Course Nomenclature and Course Numbering System:

Each course is numbered by 3 capital letters (MPH) followed by three digits, course title and credit hours. The course code starts with 5 (five) will indicate the code of Core Courses (501) and 6 (six) will indicate the code of Elective Courses (601).

**Core Courses:** Core courses are compulsory for every student unless s/he has been exempted with prior approval from the Program Director if a similar graduate level course was taken before at an accredited university or by passing a competency test for the same or an equivalent course. The program offers the following 14 core courses:

SI No	Core Courses		Number of Credits
1	MPH 501	Health systems of Bangladesh	3
2	MPH 502	One Health	3
3	MPH 503	Biostatistics-I	3
4	MPH 504	Epidemiology-I	3
5	MPH 505	Demography	3
6	MPH 506	Environmental and Occupational Health	3
7	MPH 507	Health education, promotion and communication	3
8	MPH 508	Public Health Leadership	3
9	MPH 509	Information Science for Health Services	3
10	MPH 510	Social and Behavioral Sciences in Public Health	3
11	MPH 511	Health Economics & Financing of Public Health	3
12	MPH 512	Research and Evaluation Methods	3
		<b>Core Courses</b>	<b>36</b>
13	MPH 513	Dissertation/Capstone Project	6
14	MPH 514	Practicum/Internship	6
		<b>Core+ Dissertation/Capstone Project+ Practicum/Internship</b>	<b>48</b>

		<b>Electives - 4 courses</b>	<b>12</b>
	<b>Total</b>		<b>60</b>

**Elective Courses:**

In addition to core courses, the program offers several elective/optional courses that allow students to explore and identify courses relevant to their academic interest and career persuasion. There is an opportunity for flexible options to meet learning need of the students. Following is the list of courses but additional courses may be added as the need arises with changes in public health scenario:

<b>Sl No</b>	<b>Elective Courses</b>		<b>Number of Credits</b>
1	MPH 601	Biostatistics-2	3
2	MPH 602	Epidemiology-2	3
3	MPH 603	Public Health Nutrition	3
4	MPH 604	Public Health Dentistry	3
5	MPH 605	Hospital Management	3
6	MPH 606	Public Health Strategies, Policy and Programs	3
7	MPH 607	Public Health Law and Ethics	3
8	MPH 608	Public Health of Aging	3
9	MPH 609	Non-Communicable Diseases	3
10	MPH 610	Professional Education and Training	3
11	MPH 611	Infectious Diseases Epidemiology	3
12	MPH 612	Humanitarian Health in Emergencies	3
13	MPH 613	Community Mental Health	3
14	MPH 614	Agriculture and Industrial Health and Safety	3
15	MPH 615	Climate Change and Public Health	3

**The Specialization/Major/Track Course offers the following areas:**

The MPH Program offers six Specialization/Major/Trackcourses out of which students are obliged to take at least one.

1. Epidemiology
2. Hospital Management
3. Health Education Communication and Promotion
4. Public Health Nutrition
5. Occupational and Environmental Health
6. Public Health Dentistry



SL #	Specialized/Major Areas	Elective Courses to Take	Number of Credits
1	MPH-Major 1 Epidemiology	All Core courses + 4 Elective Courses: Epidemiology-2, Infectious Disease Epidemiology, Biostatistics-2, Non-Communicable Diseases	12
2	MPH-Major 2 Health Education Communication and Promotion	All Core courses + 4 Elective Courses: Professional Education and Training, Public Health Law and Ethics, Climate Change and Public Health, Humanitarian Health in Emergencies	12
3	MPH-Major 3 Hospital Management	All Core courses + 4 Elective Courses: Hospital Management, Community Mental Health, Public Health Strategies, Policy and Programs, Public Health Law and Ethics	12
4	MPH-Major 6 Occupational and Environmental Health	All Core courses + 4 Elective Courses: Agricultural and Industrial Health and Safety, Epidemiology-2, Non-Communicable Diseases, Professional Education and Training	12
5	MPH-Major 7 Public Health Dentistry	All Core courses + 4 Elective Courses: Public Health Dentistry, Professional Education and Training, Non-Communicable Diseases, Community Mental Health	12
6	MPH-Major 8 Public Health Nutrition	All Core courses + 4 Elective Courses: Public Health Nutrition, Professional Education and Training, Non-Communicable Diseases, Community Mental Health	12

**Teaching-Learning Methods:** The program emphasizes active, student-involved learning, problem solving, and the acquisition of competencies essential to the practice of public health services, education, research, communication and advocacy.

The following teaching - learning methods, among others, will be followed:

1. **Large Group Teaching:** Lecture and seminar
2. **Small Group Teaching:** Tutorial, demonstration, student interaction, Problem Based Learning (PBL)
3. **Practical session:** Use of equipment, learning exercises and simulations where public health practitioners can transfer knowledge about applying practical skills to students.
4. **Field Placement:** In small groups for performing activities by the students themselves under the supervision of a Faculty Member.

5. **Clinical/Community teaching:** As and when required in settings such as hospitals, health centres, urban NGO, or village outreach.
6. **Integrated teaching:** Developing ICT skills through a fully-equipped computer lab at IUBAT.
7. **Practicum/Internship:** On successful completion of course work, students will enroll for a semester-long, journal-based internship program in affiliated government departments, hospital, public health organization or in the community. Each student's Practicum/Internship experience will be structured and supervised by a faculty member.
8. **Dissertation/Capstone Project:** Each MPH student must complete a dissertation /capstone project prior to graduation as the final requirement for the MPH degree. Primary research will be the usual and preferred methodology, but students can also submit proposals based on robust secondary research (e.g. meta-analysis) for complex or novel subjects. The student's Dissertation /Capstone work is to be carried out during their Internship semester. *For this project, students demonstrate their proficiency of public health competencies through two requirements:*
  - 8.1. *A formal paper (choose one):*
    - *5000 word research paper/report(excluding tables, figures, references)*
    - *Formal manuscript prepared for peer-reviewed public health journal*
  - 8.2. *An oral presentation (choose one):*
    - *40-minute presentation on the dissertation topic .*
    - *Poster presentation on the dissertation topic with hosted question-and-answer session*
    - *An oral defence of the dissertation paper.*
9. **Assessment System:** There will be in-course (Formative) and end-course (Summative) assessment for the students.
  - 9.1. Formative Evaluation:
    - Course work assignment
    - Class tests, quizzes
    - Case presentation
    - Field practice case study report
  - 9.2. Summative Evaluation:
    - Final written examination
    - Viva examination

## GRADING SYSTEM

IUBAT follows a letter grading system and the grades A, B+, B, B-, C+, C, C-, D+ and D are considered passing grades.

Grade 'F' is the failing grade. The numerical equivalent of grades with meaning of each grade is given below:

Marks Range	Letter Grade	Grade Points
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90-00	A	4.0
87-89	B+	3.7
84-86	B	3.4
80-83	B-	3.1
77-79	C+	2.8
74-76	C	2.5
70-73	C-	2.2
65-69	D+	1.5
60-64	D	1.0
Below 60	F	0.0

The following abbreviations are used to indicate the status of a student in respect of a course:

- (1) I : Incomplete
- (2) W : Course Withdrawal
- (3) E : Exempted
- (4) R : Course Repeated
- (5) Aud : Audit
- (6) Addm. Audit : A. Aud
- (7) P/F : Pass / Fail

The grade “I” may be assigned by faculty at the end of a semester to designate incomplete work in a course. It should be used only when a student is unable to complete requirements of the course because of illness, hardship or death in the immediate family. Incomplete (I) should only be given if the student has already substantially completed the major requirements of the course. “I” must not be assigned to a student if s/he has no potential of successfully passing the course even after passing in the incomplete part of the course through the “I” removal examination. The grade ‘I’ must be removed as soon as possible but no later than 3 weeks from the beginning of the next semester. At the end of deadline, the faculty must submit the final grade or this is automatically converted into “F” grade.

Students are required to meet all course requirements of a program and a student will have to repeat a course with ‘F’ grade when offered. Students may also repeat courses for improving grades below B. Only the highest letter grade received in a given course will be used in computing a student's cumulative grade point average, if the student has completed the course more than once and previously received a grade below B in that course. The lower grade will not be used in computation of cumulative grade point average, but it will remain a part of the permanent record and will appear in any transcript, unless removed through Administrative Audit. To be in good standing, a student must maintain a CGPA of 2.5 at the end of each semester and must have earned this minimum CGPA to graduate.

**COURSE DETAILS**  
**Core Courses**

**Health systems of Bangladesh**

**Course Code: MPH-501**

**Credits: 03**

**Exam Hours: 03**

**CIE Marks: 50**

**SEE Marks: 50**

**Course Learning Outcomes (CLO): At the end of the course, the student will be able to:**

<b>CLO 1</b>	Understand Healthcare Delivery System of Bangladesh
<b>CLO 2</b>	Supply and Demand of Healthcare workforce of Bangladesh
<b>CLO 3</b>	Describe the Healthcare organizations functioning in Bangladesh
<b>CLO 4</b>	Know about Health Policy, Drug Policy, National Health Budget and Available resources

**Mapping of Course Outcomes to Program Outcomes:**

	<b>PLO 1</b>	<b>PLO 2</b>	<b>PLO 3</b>	<b>PLO 4</b>	<b>PLO 5</b>	<b>PLO 6</b>	<b>PLO 7</b>
<b>CLO 1</b>	X	X					
<b>CLO 2</b>			X	X			
<b>CLO 3</b>					X		
<b>CLO 4</b>				X			

**Course Content:**

<b>Sl</b>	<b>Summary</b>	<b>Hrs</b>	<b>CLOs</b>
1	<p><b>Module 1: Healthcare Delivery System of Bangladesh:</b></p> <ul style="list-style-type: none"> <li>• Healthcare organizations of Bangladesh               <ul style="list-style-type: none"> <li>○ Primary, secondary and tertiary care (definitions and descriptions of current service system)</li> <li>○ Role of national and international NGOs, charitable and nonprofit organizations</li> <li>○ The role of private business in hospital and community settings (including medical consultant practice)</li> </ul> </li> <li>• Rural health and service delivery structure</li> <li>• Urban health and its challenges</li> <li>• Services for vulnerable population groups</li> </ul>	12	1
2	<p><b>Module 2: The healthcare workforce of Bangladesh</b></p> <ul style="list-style-type: none"> <li>• Tools and methods to analyze supply of doctors, dentists, nurses, midwives, pharmacists, etc.</li> </ul>	9	2

	<ul style="list-style-type: none"> <li>• The informal health care workforce (CHWs, druggists, traditional healers etc.)</li> <li>• Role of public health graduates as employees, employers, independent practitioners, educators</li> <li>• Pre-service education, Continuing Professional Development, quality assurance and regulation of healthcare workers</li> <li>• Impact of education and working conditions on emigration of healthcare workers</li> </ul>		
3	<p><b>Module 3: Describe the Healthcare organizations functioning in Bangladesh</b></p> <ul style="list-style-type: none"> <li>• How government agencies deliver health services (legislation, structure of relevant departments)</li> <li>• Resource allocation and the health budgeting/ planning process (including infrastructure investments)</li> <li>• Government's role in regulation and accountability (education of providers, performance standards for government services, oversight of private sector and NGOs)</li> </ul>	9	3
4	<p><b>Module 4: Know about Health Policy, Drug Policy, National Health Budget and Available resources</b></p> <ul style="list-style-type: none"> <li>• Policies, processes and procedures for engaging stakeholders and improving system performance</li> <li>• Concepts and methods to promote accountability for results</li> <li>• Historic overview of major initiatives (e.g. Health Policy, Drug Policy, Urban Health Strategy)</li> <li>• Know about Health Policy, Drug Policy, National Health Budget</li> </ul>	6	4

### REFERENCE BOOKS:

There is no required textbook for the course. However, the following readings and texts are suggested as references or examples.

1. Bangladesh Health System Review, WHO  
[https://iris.wpro.who.int/bitstream/handle/10665.1/11357/9789290617051\\_eng.pdf](https://iris.wpro.who.int/bitstream/handle/10665.1/11357/9789290617051_eng.pdf)
2. Primary Health Care Systems, WHO  
<https://www.who.int/alliance-hpsr/projects/AHPSR-PRIMASYS-Bangladesh-comprehensive.pdf?ua=1>
3. Health for all in Bangladesh: Lessons in primary health care for the twenty-first century by [Henry B Perry](#), 2000
4. Health Bulletins,

<https://dghs.gov.bd/index.php/en/publications/health-bulletin/dghs-health-bulletin>

**Assessment pattern:**

**CIE-Continuous Internal Evaluation (50 Marks)**

<b>Bloom's Category Marks (out of 50)</b>	<b>Tests (25)</b>	<b>Assignments (10)</b>	<b>Quizzes (5)</b>	<b>External Participation in Extra/co-curricular activities (10)</b>
<b>Remember</b>			5	
<b>Understand</b>		5		
<b>Apply</b>	8			10
<b>Analyze</b>	9			
<b>Evaluate</b>	8			
<b>Create</b>		5		

**SEE- Semester End Examination (50 marks)**

<b>Bloom's Category Marks (out of 50)</b>	<b>Marks</b>
<b>Remember</b>	5
<b>Understand</b>	10
<b>Apply</b>	15
<b>Analyze</b>	10
<b>Evaluate</b>	5
<b>Create</b>	5

**DETAILS OF OTHER COURSES WILL BE MADE AVAILABLE DURING STUDY PERIOD**