Independent University **Bangladesh (IUB)**

IUB Academic Repository

School of Pharmacy & Public Health Pharmacy

2006

MPH Catalogue 2006-2007

INDEPENDENT UNIVERSITY, BANGLADESH

https://ar.iub.edu.bd/handle/11348/135

Downloaded from IUB Academic Repository

Master of Public Health

MPH Catalogue 2006-2007

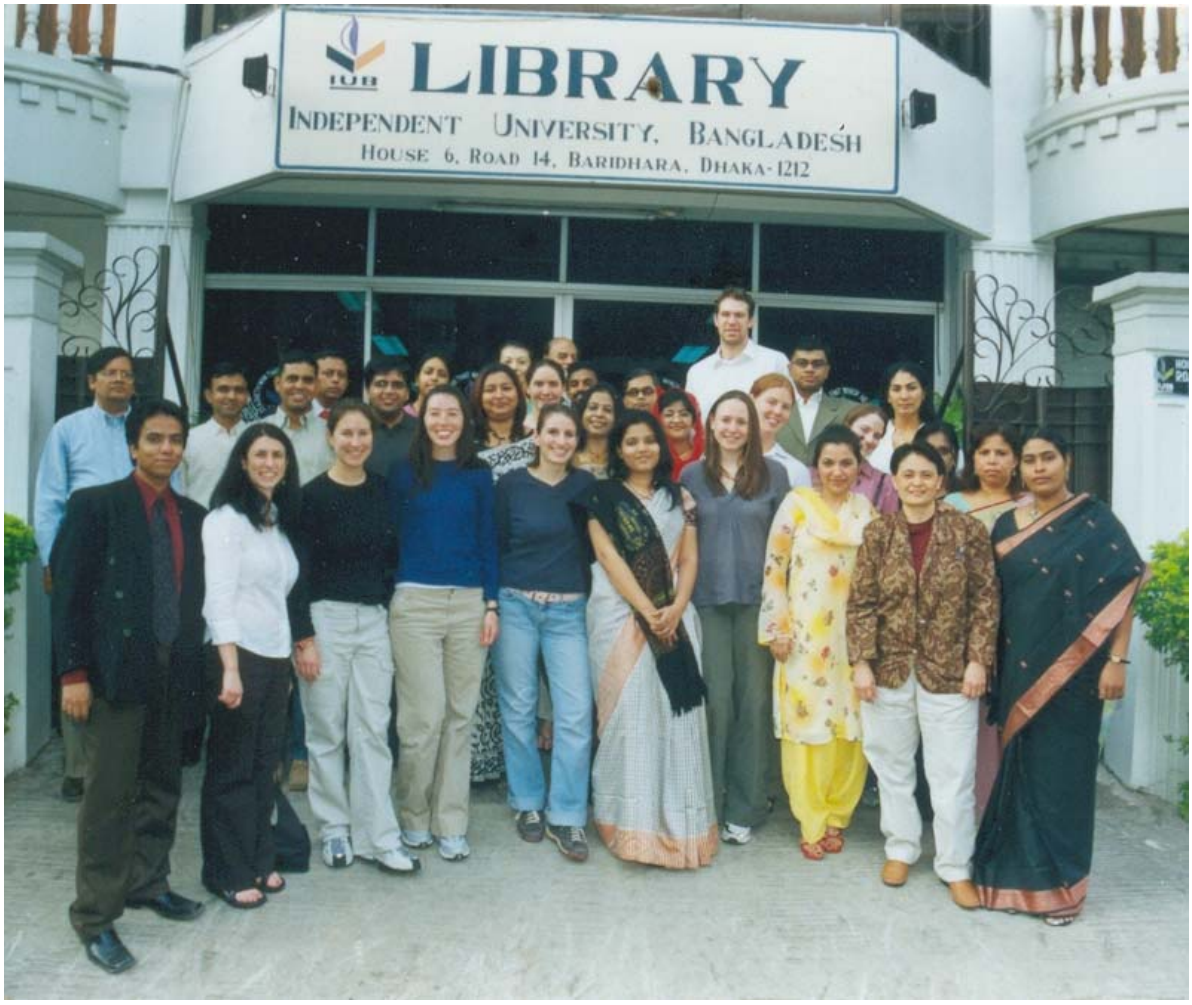
World Health Day: Mental Health www.paho.org



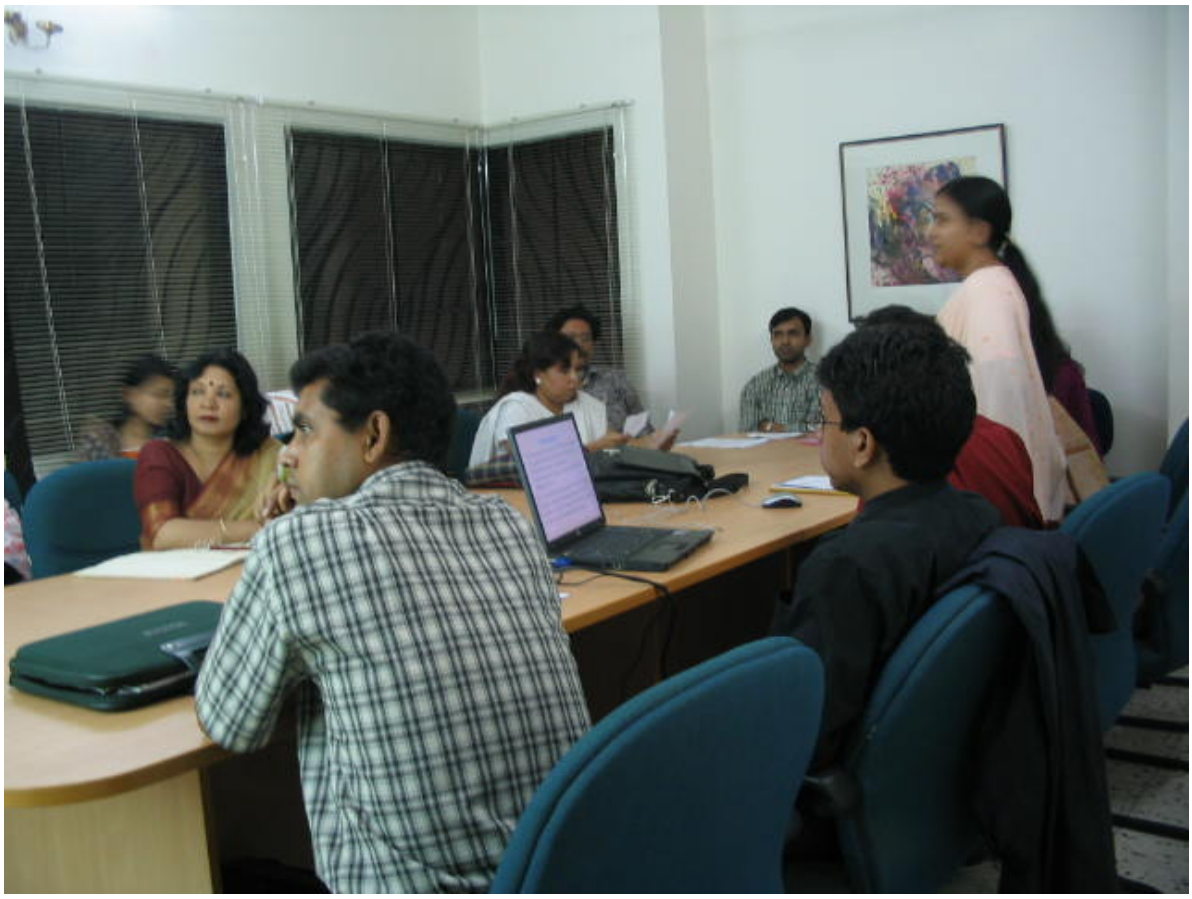
IUB

Independent University, Bangladesh

Baridhara, Dhaka



MPH Students from Harvard University visiting IUB



Individual Presentation in a class on Project Design

Table of Contents:

	Page
1. Introduction	2
2. Course Description (Credits and Duration)	3
3. Admission Criteria	3
4. Evaluation Procedure	4
5. Support for research and development	5
6. Centre for Health, Population and Development	5
7. International Collaboration	7
8. Financial Aid	8
9. Advisory committee for MPH syllabus and teaching	8
10. Course Outline and Schedule (12 months)	9
11. Course Outline and Schedule (24 months)	10
12. Culminating Project / Thesis	13
13. Description of Courses	14
14. List of Faculty Members	31
15. List of Students	34

1. Introduction:

The social, economic and cultural dimensions of health and population are a major focus of both governments and non-governmental organizations (NGOs) in Bangladesh and in other developing countries. It is now increasingly being recognized that there is a need for professionals who are well trained in the multi-faceted complex interactions of social, economic and cultural factors affecting health and population, such as plateauing fertility rates, inadequate health services coverage, the ongoing epidemiological transition from infectious to chronic diseases, and emerging public health issues such as HIV-AIDS and Arsenic contamination of water supplies. There is however a critical shortage of such professionals in these countries. This increased demand for such personnel comes at a time where funding for this kind of education abroad (United States, Europe, Australia/New Zealand, Asia) is extremely limited and will continue to be so in the future. Thus there exists a window of opportunity for in-country training of high quality at the master's level in Public Health, which focuses on social-economic and cultural dimensions of health and population.



Independent University, Bangladesh (IUB) is particularly well positioned to meet this demand, as it has a well-established track record of providing instruction in the health, population and social sciences. IUB has the oldest department of population-environment in Bangladesh, operating now for over 12 years, and providing high quality undergraduate education in the interactions between population, health and environment. In addition the Centre for Health, Population and Development at Independent University, Bangladesh continues to promote research and scholarly activities in the broad area of health, population and development through seminars, training programs, publications and numerous research collaborations both nationally and internationally.

In light of the above, Independent University, Bangladesh is pleased to offer the following post-graduate program leading to the Master of Public Health (M.P.H.).

2. Course Description (Credits and Duration):

The M.P.H. program consists of 33 credits[I] and will span twelve calendar months divided into six (two month long) modules. Five modules involve coursework with the last module being allocated for the culminating project or thesis. Each of the five-coursework modules will consist of 4 courses for a total of 20 courses, each worth 1.5 credits (22.5 hours of class time). In addition to the mandatory 17 core courses, each MPH student will have to choose a specialization consisting of 3 additional courses from one of the following choices: (i) **Population and Reproductive Health; (ii) Quantitative Methods; (iii) Environmental Health; and (iv) Psychosocial and Community Health.** In addition to the 20 courses noted above, each student will have to work closely with a faculty member/s to complete a culminating project/thesis (worth 3 credits) that will be individually tailored and will consist of a substantial exercise integrating the skills that the student has acquired during her/his MPH course work. Courses will be offered in the evening from 6pm to 9pm, Sunday through Wednesday.

In addition to the regular coursework and thesis noted above, MPH students are also required to attend the weekly health, population and development seminar series organized by CHPD.

Prior to admission to the MPH course, all candidates must enroll for a four week refresher course in Biostatistics and Computing (9 hrs/wk * 4 weeks) which will run the whole month of August. Selected students may be allowed to test out of this requirement depending on the discretion of the faculty.

****Please note that for applicants working full time, the MPH course will be spread out over 24 months instead of the normal 12 months*.

3. Admission Criteria

Candidates must have the following qualifications to be eligible for admission to the Master of Public Health program:

a. An M.B.B.S. / equivalent degree in Dental Sciences from a recognized university / Dental college
b. A Masters degree from a recognized university or accredited institution of higher education
c. A three to four year Bachelor's degree from a recognized university or accredited institution of higher education

Applicants for admission will be evaluated on the basis of their academic record, recommendations, and work experience. Non-Bangladeshi applicants are required to submit results of the GRE exam and the TOEFL or IELTS.



[I] One credit is equivalent to 15 lecture hours

Bangladeshi applicants are required to sit for a written and oral examination which will evaluate their English language, numerical and analytic skills. Applicants are expected to have good skills in English reading, writing, speaking and comprehension; basic numerical skills and basic computer skills.

4. Evaluation Procedure:

In the MPH program, evaluation consists of assessment of performance in: class participation; regular homework assignments; take home examinations, a mid term and a final exam/paper. Examinations may be substituted in some courses by oral presentations and research papers/report. The MPH program puts specific emphasis on developing oral and written communication skills at the highest international levels, and students will have extensive exposure to presentations (both oral and written) in every course. In addition to the formal coursework, at the end of the twelve-month MPH course, each student will have to complete a substantial final project / thesis and present it both orally and in written form to a three to four member evaluation committee. The evaluation committee will include one external member from a public institution, preferably NIPSOM, for the concerned subjects.

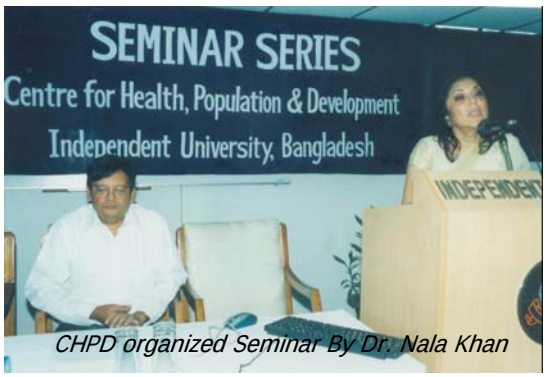
The passing grade for each course is C+, which is equivalent to 65.0 percent. The qualifying mark for earning the M.P.H. degree is a grade point average GPA of B which is equivalent to 75.0 percent. Students must maintain a minimum 2.7 CGPA to remain enrolled in the Master of Public Health program. For the sake of specificity, the following letter grades shall be considered for course evaluation.

			GPA WEIGHT
A	=	90—100 %	4.0
A-	=	81—89 %	3.7
B+	=	76—79 %	3.3
B	=	75 %	3.0
B-	=	70—74 %	2.7
C+	=	65 %	2.3

If a student fails to get C+ in any course he/she is deemed to have failed; and in that case, he/she shall have to repeat the course once again in the following year or take some other additional courses to make up the loss at the discretion of the faculty.

In the event of a student's inability to continue after completion of at least two modules, she/he is entitled to a leave of absence for one year. If the student fails to continue after one year, their previously earned credits shall not be considered or counted towards the M.P.H. degree.

5. Support for research and development.



CHPD organized Seminar By Dr. Nala Khan

IUB is proud of the fact that it is one of the few universities in Bangladesh which explicitly subsidizes and supports research and development. Both faculty members and students are required to be engaged in research projects.

The university wide Centre for Health, Population and Development (headed by Professor Omar Rahman who will also direct the MPH program) has a vigorous and extensive research program which includes weekly seminars, journal clubs, working paper series, peer reviewed publications, and on-going research collaborations with both national and international institutions. —Please refer below and to the CHPD website at www.iub.edu.bd/chpd/index.htm

6. The Centre for Health, Population and Development:



There is relatively little capacity for independent research and informed policy discussions about the inter-connections between Health, Population and Development in the developing world, although these issues are central to understanding and shaping the future of developing countries. Non-partisan research and scholarly activities are crucial in the ongoing policy debate about these concerns. An academic institution like Independent University, Bangladesh (IUB) is especially well positioned to play a leading role in furthering this agenda.



The Centre for Health, Population and Development (CHPD) at Independent University, Bangladesh is a newly created university wide research and training centre. Its primary objective is to generate and promote research, scholarly and training activities in the broad area of population, health and development. We hope to be a national, regional, and international centre of excellence. We sponsor the following activities: a regular seminar series which publicizes the work of prominent academics and policy makers (currently 4 times a month), training workshops (e.g. UNFPA sponsored training workshop on population-development for mid-senior level government officials), a journal club for junior scholars and students, a working paper series, peer reviewed publications, student internships for foreign students (undergraduates and graduate students from Harvard, the University of Pennsylvania, Georgetown,


Md. Moin Uddin Khan, Office Manager, CHPD

Johns Hopkins, University of Vermont have spent internships with us), and the administering of short courses on research methodology, data analysis, leadership for women in development etc. We are also a collaborating site of the South Asian Network of Evidence Based Medicine. In September 2005 we started a twelve-month Masters in Public Health program (offered through IUB but administered by CHPD) to train health professionals. Other future activities include starting a peer-reviewed academic journal on health, population and development, and initiating a biennial independent analytic report on progress in health, population and development in Bangladesh.

Our centre associates come from a range of disciplines including demography, epidemiology, anthropology, sociology, economics, biostatistics, medicine, public health, geography and environmental science. They include national (both within and outside IUB), regional and international scholars and policy makers. Our current areas of research and training include: (i) Aging and social networks; (ii) Mental Health policy and research in developing countries; (iii) Higher Education and Development; (iv) Migration and Diaspora Formation; (v) Adolescent Reproductive Health; (vi) Gender Issues in Health and Development; (vii) Population-Environment linkages; (ix) The Social and Behavioral Aspects of HIV-AIDS.



Seminar By Dr. Kazi Anis Ahmed

We at present have ongoing scholarly and research collaborations with Harvard University, Brown University, The University of Maryland, the University of Colorado at Boulder, The University of Vermont, Florida A &M University, Mcmaster University, the National University of Singapore, Jawaharlal Nehru University in Delhi, Christian Medical College in Vellore, the Aga Khan University in Karachi, Pakistan, ICDDR,B: Centre for Health and Population Research, Bangladesh, and the South-South Centre in Bangladesh. Our research projects have been funded by the US National Institutes of Health, the US National Science Foundation, USAID, CIDA, The Global Health Forum, The United Nations Fund for Population Activities and many other institutions nationally and internationally.



International Workshop on Health System & Equty, Held on May 2005

7. International Collaboration:

Dr. Richard Cash from HSPH lecturing on Ethics



IUB vigorously promotes and encourages both student and faculty collaboration with institutions in the South and North for research and training. CHPD has a regular internship program for foreign students interested in internships on health and development in the developing world. It has hosted students from Harvard University, the University of Pennsylvania, the University of Calgary etc. Harvard MPH students have visited the IUB MPH program in 2006 January and we hope to continue this exchange with Harvard and other institutions. A variety of guest lecturers from various institutions internationally (Harvard School of Public Health, Harvard Medical School, Jawaharlal Nehru University, The Centre for Studies in Ethics and Rights, Mumbai) also visit and lecture at the MPH program



Summer Interns from Harvard University



Harvard MPH students visiting IUB MPH program-Jan 2006

8. Financial Aid:

IUB is committed to providing financial support to needy meritorious students and it will continue to do this for MPH students with a mix of full and half tuition waivers and graduate assistantships.



9. Advisory committee for MPH syllabus and teaching

We at IUB take monitoring and evaluation of the MPH course very seriously. We are planning to set up an expert review group of national and international public health experts who will meet once a year to review, critique and help improve our MPH syllabus and teaching activities. We propose the following tentative list subject to availability:

1. Chairman: Vice Chancellor of Independent University, Bangladesh
2. Member Secretary: Professor Omar Rahman—Director of MPH program
3. Member: Dr. M. A. Mabud—core faculty member
4. Member: Professor Nashid Kamal—core faculty member
5. Member: Professor Haroun Er Rashid—core faculty member and Director, School of Environmental Science and Management, IUB
6. National Expert: Director General Health
7. National Expert: Director General Family Planning
8. National Expert: Director General NIPORT
9. Director, NIPSOM
10. Representative of the Vice Chancellor, Bangabandhu Sheikh Mujib Medical
11. National Expert: Principal of Armed Forces Medical College
12. National Expert: Senior Representative from BRAC
13. National Expert: Senior Representative from Gono Sasthya Kendra
14. National Expert: Director of ICDDR,B
15. National Expert: Bangladesh Country Director of the Population Council
16. National Expert: Senior Representative of the University Grants Commission
17. National Expert: Senior Representative from UNFPA
18. National Expert: Senior Representative from WHO
19. International Expert: Chairman of Dept of Population and International Health, Harvard School of Public Health—Professor David Bloom
20. International Expert: Director of Harvard Centre for Population and Development: Professor Michael Reich
21. International Expert: Renowned Demographer, Dean of Social and Behavioral Science and member of the U.S. National Academy of Sciences: Professor Jane Menken, University of Colorado at Boulder
22. International Expert: Director of the Africa Centre: Dr. Michael Bennish

10. Course Outline and Schedule (12 months):

Course Code	Course Name	Weeks	X	Hrs/wk (app)[2]	Total Class Hrs[3]	Total Credits
First module (September 1st to October 30th)						
HSC-501A:	Epidemiology I	8	X	3	22.5	1.5
HSC-502A:	Statistics I	8	X	3	22.5	1.5
HSC-503:	Global Population, Health & Development	8	X	3	22.5	1.5
HSC-504:	Environmental Health	8	X	3	22.5	1.5
HSC-505A:	Public Health Seminar	8	X	1	8	Non credit
Second module (November 1st to December 31st)						
HSC-501B:	Epidemiology II	8	X	3	22.5	1.5
HSC-502B:	Statistics II	8	X	3	22.5	1.5
HSC-506:	Intro to Public Health Educ. & Nutrition	8	X	3	22.5	1.5
HSC-507A:	Health Management and Economics I	8	X	3	22.5	1.5
HS-505 B:	Public Health Seminar	8	X	1	8	Non credit
Third module (January 1st to February 28th)						
HSC-502C:	Statistics III	8	X	3	22.5	1.5
HSC-507B:	Health Management and Economics II	8	X	3	22.5	1.5
HSC-508A:	Research Methods I	8	X	3	22.5	1.5
HSC-509:	Society Culture & Health	8	X	3	22.5	1.5
HSC-505C:	Public Health Seminar	8	X	1	8	Non credit
Fourth module (March 1st to April 30th)						
HSC-508B:	Research Methods II	8	X	3	22.5	1.5
HSC-510A:	Project Design & Evaluation I	8	X	3	22.5	1.5
HSC-xxx:	Elective I	8	X	3	22.5	1.5
HSC-xxx:	Elective II	8	X	3	22.5	1.5
HSC-505D:	Public Health Seminar	8	X	1	8	Non credit
Fifth module (May 1st to June 30th)						
HSC-510B:	Project Design & Evaluation II	8	X	3	22.5	1.5
HSC-xxx:	Elective III	8	X	3	22.5	1.5
HSC-511:[4]	Introduction to Human Health…	8	X	3	22.5	1.5
HSC-512:	Bio-Ethics	8	X	3	22.5	1.5
HSC-505E:	Public Health Seminar	8	X	1	8	Non credit
Sixth module (July 1st to August 31st)						
HSC-513	Culminating Project/Thesis	8	X	6	45.0	3.0

*** The MPH program will observe all religious holidays as per the IUB calendar.**

[2] Each course consists of 2 lectures a week with each lecture running for 1.5 hours

[3] Due to holidays and unanticipated closures, each module consists of 15 lectures of 1.5 hours each for a total of 22.5 hours per one module course.

[4] This course is only required for MPH students coming from a non-medical/dental/nursing background.

11. Course Outline and Schedule (24 months):

First Year

Course Code	Course Name	Weeks	X	Hrs/wk (app)[5]	Total Class Hrs[6]	Total Credits
First module (September 1st to October 30th)						
HSC-501A:	Epidemiology I	8	X	3	22.5	1.5
HSC-502A:	Statistics I	8	X	3	22.5	1.5
HSC-505A[7]:	Public Health Seminar	4	X	1	4	Non credit
Second module (November 1st to December 31st)						
HSC-501B:	Epidemiology II	8	X	3	22.5	1.5
HSC-502B:	Statistics II	8	X	3	22.5	1.5
HSC-505B:	Public Health Seminar	4	X	1	4	Non credit
Third module (January 1st to February 28th)						
HSC-502C:	Statistics III	8	X	3	22.5	1.5
HSC-508A:	Research Methods I	8	X	3	22.5	1.5
HSC-505C:	Public Health Seminar	4	X	1	4	Non credit
Fourth module (March 1st to April 30th)						
HSC-508B:	Research Methods II	8	X	3	22.5	1.5
HSC-xxx:	Elective I	8	X	3	22.5	1.5
HSC-505D:	Public Health Seminar	4	X	1	4	Non credit
Fifth module (May 1st to June 30th)						
HSC-xxx:	Elective II	8	X	3	22.5	1.5
HSC-511:[8]	Introduction to Human Health…	8	X	3	22.5	1.5
HSC-505E:	Public Health Seminar	2	X	1	2	Non credit
Sixth module (July 1st to August 31st)						
	FREE		X			

[5] Each course consists of 2 lectures a week with each lecture running for 1.5 hours

[6] Due to holidays and unanticipated closures, each module consists of 15 lectures of 1.5 hours each for a total of 22.5 hours per one module course.

[7] Students in the 24 month program are only expected to "attend" 2/4 seminars a month. Because of work responsibilities, physical attendance is not required. Students will review the presentation saved on the website and prepare a 1page summary of the seminar at their convenience every week.

[8] This course is only required for MPH students coming from a non-medical/dental/nursing background.

Course Outline and Schedule (24 months):

Second Year

Course Code	Course Name	Weeks	X	Hrs/wk (app)[9]	Total Class Hrs[10]	Total Credits
First module (September 1st to October 30th)						
HSC-503:	Global Population, Health & Development	8	X	3	22.5	1.5
HSC-504:	Environmental Health	8	X	3	22.5	1.5
HSC-505A:	Public Health Seminar	4	X	1	4	Non credit
Second module (November 1st to December 31st)						
HSC-506:	Introduction to Public Health Education and Nutrition	8	X	3	22.5	1.5
HSC-507A:	Health Management and Economics I	8	X	3	22.5	1.5
HSC-505B:	Public Health Seminar	4	X	1	4	Non credit
Third module (January 1st to February 28th)						
HSC-507B:	Health Management and Economics II	8	X	3	22.5	1.5
HSC-509:	Society Culture & Health	8	X	3	22.5	1.5
HSC-505C:	Public Health Seminar	4	X	1	4	Non credit
Fourth module (March 1st to April 30th)						
HSC-510A:	Project Design & Evaluation I	8	X	3	22.5	1.5
HSC-xxx:	Elective III	8	X	3	22.5	1.5
HSC-505D:	Public Health Seminar	4	X	1	4	Non credit
Fifth module (May 1st to June 30th)						
HSC-510B:	Project Design & Evaluation II	8	X	3	22.5	1.5
HSC-512:	Bio-Ethics	8	X	3	22.5	1.5
HSC-505E:	Public Health Seminar	2	X	1	2	Non credit
Sixth module (July 1st to August 31st)						
HSC-513	Culminating Project/Thesis	8	X	6	45.0	3.0

*** The MPH program will observe all religious holidays as per the IUB calendar.**

[9] Each course consists of 2 lectures a week with each lecture running for 1.5 hours

[10] Due to holidays and unanticipated closures, each module consists of 15 lectures of 1.5 hours each for a total of 22.5 hours per one module course.

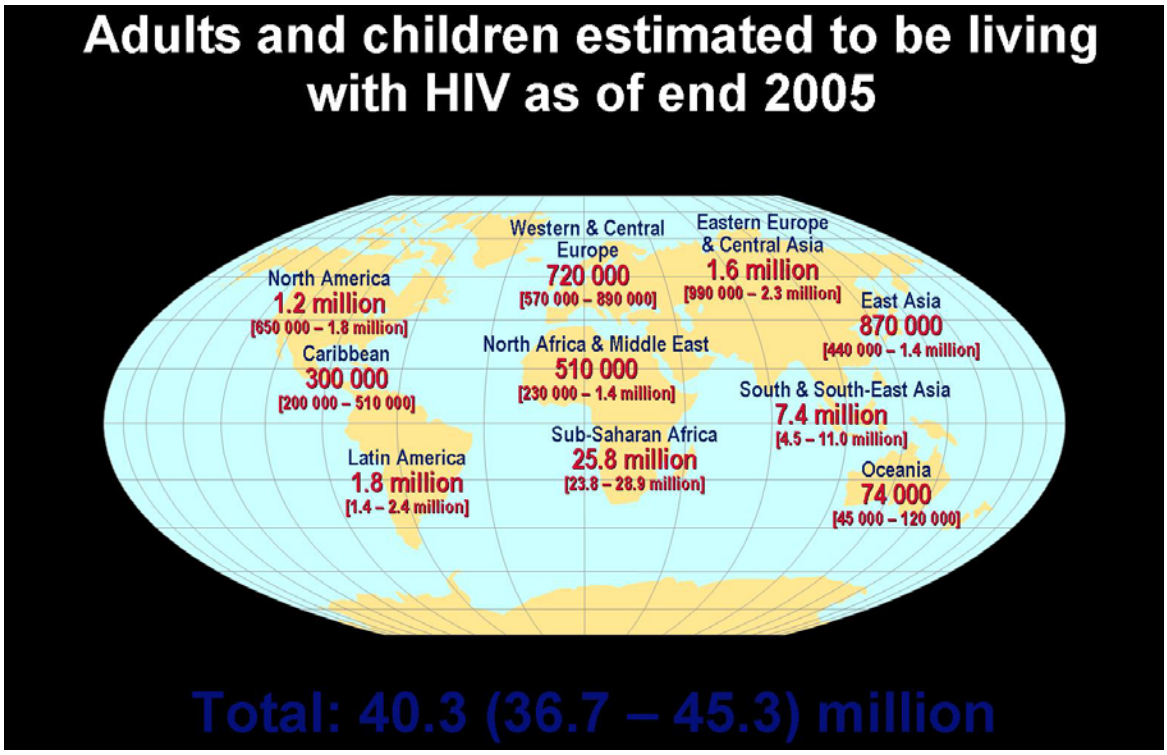
Electives/Specializations: (all courses 1 module long)[11]

Population and Reproductive Health:
Elective I: HSC-514: Migration and Health
Elective II: HSC-515: Public Policies in Health, Population and Economy
Elective III: HSC-516: Reproductive Health/HIV

Environmental Sciences:
Elective I: HSC-517: Environmental and Social Impact Assessment.
Elective II: HSC-518: Natural Hazards, Risk Assessment & Disaster Management.
Elective III: HSC-519: Geographic Information Systems-I.

Psycho-social and Community Health:
Elective I: HSC-520: The psycho-social dimensions of Behavioral Health
Elective II: HSC-521: Behavioral Change and Communication
Elective III: HSC-522: Mass Media and Communication for Health and Population

Quantitative Methods in Health and Population Management:
Elective I: HSC-523: Linear Regression
Elective II: HSC-524: Logistic Regression
Elective III: HSC-525: Population and Health Services Projections



[11] Specializations will only be offered if there are at least five students who have signed up for it

12. Culminating Project/Thesis:

An important feature of IUB's M.P.H. Program is the culminating project/thesis. The expectation is that the students will demonstrate their knowledge and skills which they have acquired as a result of their coursework in an integrative exercise which may include participatory work (internship), field observation, and some data collection relevant to their topic of research interest. The students are required to produce a substantial analytical report and make a formal presentation of their report to an expert group of 3-4 members as partial fulfillment of their requirement for the M.P.H. degree.

MPH students at IUB will have access to a variety of Private, Government, and Non-Government field work / training opportunities for their final project/thesis work, including UN and other multi-lateral agencies (World Bank, Asian Development Bank etc). We have extensive experience with placing students for field training at IUB. Our undergraduates are already working on internships and thesis projects at various Private firms, local and international agencies and with the GOB.



Students and International Interns visiting Rural Maternal Health Clinic

13. Description of Courses:

HSC-501A and HSC-501B: Introduction to Epidemiology I & II

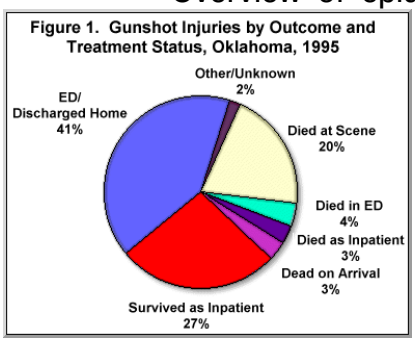


Kazi Mizanur Rahman
Course Coordinator

The primary purpose of this two-module sequence of courses is to introduce students to the basic principles and methods of epidemiology.

Topics to be covered in HS-501-A include:

- Concepts of epidemiology, its objectives and its importance in Public Health.
- Overview of epidemiology and its various fields such as infectious disease, chronic disease epidemiology, environmental epidemiology, health services epidemiology etc.



- Importance of analysis of incidence and spread of disease within the population, with the aim of establishing causality
- Review of research findings of some important epidemiological studies showing linkages between particular drinking water source and cholera: between smoking and lung cancer; between heart disease and certain fats; between oral contraceptive use and breast cancer etc.
- Sources of epidemiological data—e.g. surveillance systems; specialized sample surveys; hospital records; administrative records etc.
- Basic epidemiological tools for exposure/outcome assessment
    - The concept of person time and cumulative exposure;
    - The concept of a rate
- Measuring health and disease –
    - Incidence and prevalence rates;
    - Measures of association-e.g. risk ratios, odds ratios, attributable risk



Dipak Kumar Mitra
Course Instructor

HSC-501B will deal with more advanced quantitative approaches in epidemiology.

Topics include:

- Different kinds of epidemiological study design—longitudinal vs. cross-sectional; cohort vs. case-control.
- Differences and similarities between observational and analytical epidemiological studies;
- Differences between association and causation
- Exploration of bias, confounding and effect modification
- Controlling of confounding
- Screening. Reliability and validity (concept, uses, sensitivity, specificity, predictive values)
- Critical review of epidemiologic studies

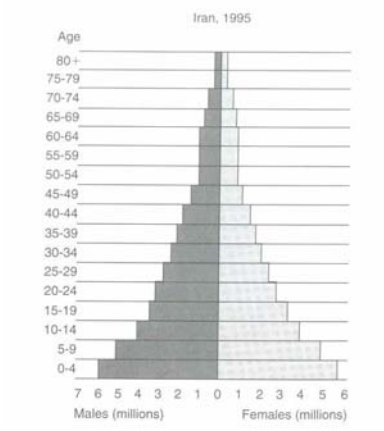


Debasish Saha
Course instructor

*(Note: HSC-501A is a pre-requisite for HSC-501B)

HSC-502 A, HSC-502 B and HSC-502 C: Introduction to Statistics I, II & III

The primary objective of this three module sequence of courses is to introduce students to the basic principles and methods of statistics that are relevant to public health.



Topics to be covered in HSC-502 A include:



Nashid Kamal
Course Co-ordinator

- Purpose, function and place of statistics in Public Health research;
- Collection and Classification of data
- Variables and parameters
- Tabular and Graphic Presentation of data;
- Rates, Proportions and ratios
- Frequency distribution and graphic presentations
- Measures of central tendencies, mean, mode and median in grouped and ungrouped data; deciles, quartiles and percentiles
- Range, co-efficient of Variation, Mean Deviation, Quartile deviation, Standard Deviation, Variance, Skew ness, Kurtosis etc

Topics to be covered in HSC-502 B include:



Shipra Banik
Course instructor

- Probability Distributions
- Inference on means and proportions
- Chi-Square Test (x^2) of null hypotheses
- Contingency tables
- Measures of association and their variance estimates
- Correlation



Topics to be covered in HSC-502 C include:



Kazi Md. Abul Kalam Azad
Course Instructor

- Introduction to linear and logistic regression.
- Construction of Regression Model(s) keeping in view hypotheses
- How to read and interpret regression results from SPSS/STATA print-out

Computer packages will be used throughout the course; and students will learn how to use data analysis software (SPSS, STATA).

*(Note: HSC-502A is a pre-requisite for HSC-502 B which is a pre-requisite for HSC-502C)

HSC-503 : Global Population, Health and Development



Omar Rahman
Course Instructor

The primary objective of this course is to present an overview of the major issues and debates in the field of population, health and development with special reference to Bangladesh. Emphasis will be placed on developing a nuanced understanding of the topics rather than on knowing specific facts and figures. Topics to be discussed include the following:

- Trends in health and population indicators in Bangladesh, regionally and globally
- The population-development context and the complex bi-directional nature of this relationship
- Overview of investments in human capital and their impact on population growth and vice versa
- Demographic window of opportunity and relationship between age structure and population momentum
- Relationship between education / income effects and health and population growth
- Migration and health and population growth
- Proximate determinants of fertility and Family Planning programs
- Analytic frameworks of health changes
- Relationship between population growth and health and vice versa
- HIV and its health and socio-economic implications
- Environmental health—Arsenic etc
- Gender issues in health and population
- Population projections and data quality issues
- Gaps, constraints and opportunities in current health and population policies.





Haroun er Rashid
Course Instructor

HSC-504: Environmental Health.

The primary objective of this course is to provide an overview of environmental problems, their health consequences, and policy approaches



Topics covered will include:

- Environmental Health Problems:
  - Water, sanitation and hygiene and the link to diarrheal and other gastro-intestinal diseases
  - Air pollution sources and links to respiratory diseases
  - Environmental health threats in natural disasters
  - Chronic toxin exposure with a particular attention paid to arsenic
  - Tools of environmental epidemiology for risk assessment;
  - Fundamentals of toxicology, and occupational exposures.

- Environmental Health Policy approaches:
  - Regulation, safe limits of exposure; industrial accountability
  - Market approaches—externalities; pollution trading; congestion taxes etc

HSC-505 A, B. C. D: Seminar Series on Health, Population and Development (Non Credit)







The Centre for Health, Population and Development along with the MPH program sponsors a weekly seminar series on the multi-faceted linkages between health, population and development issues. Prominent academics, researchers, and policy makers present on cutting edge topics. All MPH students are required to attend this series which runs for five modules (September to June)

HSC-506: Introduction to Public Health Education and Nutrition



M A Mabud
Course Instructor

The primary objective of this module is to present an overview of the major issues in the field of pubic health education with a focus on community nutrition. There will be extensive discussion of social, cultural, political and policy implications with special reference to Bangladesh. Emphasis will be placed on developing a nuanced understanding of the topics rather than on knowing specific facts and figures. Topics to be discussed include the following:

- Principles and methods of Health Education with a focus on community nutrition
- Definitions and trends in nutritional indices (wasting, stunting, malnutrition etc) nationally, regionally and internationally.
- Discussion of different kinds of nutritional data: anthropometry, food diaries, physiologic measurements, their utility and constraints
- Trends in nutritional indicators in Bangladesh, regionally and globally
- Impact of nutritional status on physical and cognitive development
- The cultural context of nutritional practices: e.g. weaning behavior, dietary norms and restrictions.
- Disparities by gender, age, and social class in nutritional indices and their socio-cultural and economic underpinnings
- Relationship between food production and distribution with malnutrition. Discussion of market failures and famines.
- Relationship between population growth and food shortages.
- Policy approaches to dealing with nutritional challenges and disparities
- Review of current and past nutritional policies and their effectiveness in the context of Bangladesh
- Review of nutritional enrichment programs and their effectiveness in the context of Bangladesh.



HSC-507A and HSC-507B: Health Management and Economics I & II



The primary objective of this course is to introduce students to various aspects of health management and economics relevant to the improvement of efficiency of a health system with a particular focus on developing countries context.



Enamul Hoque
Course Instructor

Topics to be covered in HS507A include the following:

- Key health economic concepts such as supply and demand, market equilibrium, market structure, elasticity, allocative and technical efficiency
- Various costing concepts related to health care projects and different approaches to estimate cost of health services
- The economic evaluation of health and health care technologies, various evaluation methods of health programs, such as cost effectiveness analysis, cost utility analysis and cost benefit analysis, and the constraints of these analytic methods will be discussed extensively
- The economic analysis of health care market and health care reforms
- The theory, methods and tools for the management of health sector reforms
- Health information systems and information technology for planning, production, management, monitoring and evaluation.

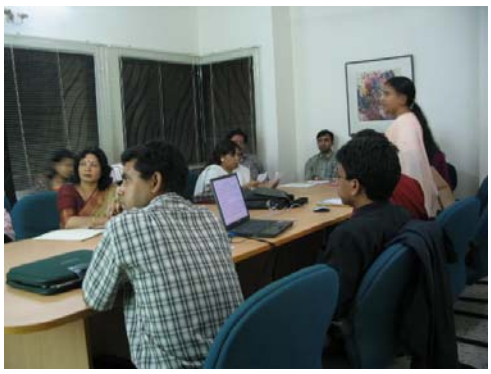
Topics to be covered in HS-507B include the following:

- Health care delivery at various service outlets like metropolitan/urban area and rural districts, upazila, union and community level. Health care delivery system of BRAC, Ganoshasthya Kendra and Grameen Health and other leading NGOs will be reviewed and discussed in a cooperative framework to delineate the best health care management practices
- Status of health services access and utilization will be examined, and the public privet partnership and its limitations will be focused
- Health care policies and programs relating to primary health care, strategies and role of various stakeholders, particularly providers, Government, NGOs community and clients/patients will be critically reviewed. Case studies of other countries in health economic policies and health care management will be discussed.
- Summary measure of population health and burden of disease analysis, its role in priority setting analysis will be captured
- Health care planning and implementation, health insurance and financing system such as social insurance, demand side financing will be discussed
- Equity efficiency trade off, gender, poverty, aging etc in health care delivery system will be discussed.



(Note: HSC-507A is a pre-requisite for HSC-507B)

HSC-508A & HSC-508B: Research Methods I & II



This course is designed to give students hands on experience in evaluating and writing health and population research grant proposals. Real world research proposals to various funding agencies will be used as teaching tools. Critical reading and citing of the public health literature as the evidentiary basis for proposals will be emphasized.



Kazi Mizanur Rahman
Course Coordinator

Topics to be covered in HSC-508 A include:



Dipak Kumar Mitra
Course Instructor

- Overview of research methods
- How to identify a research topic
- Identifying appropriate title of the study
- Listing of the key personnel of a study
- Identifying key objectives or hypothesis/es to be evaluated in proposal
- Background and literature review
- Research design and methods
- Development of data collection tools including questionnaire development

Topics to be covered in HSC-508 B include:



Debasish Saha
Course instructor

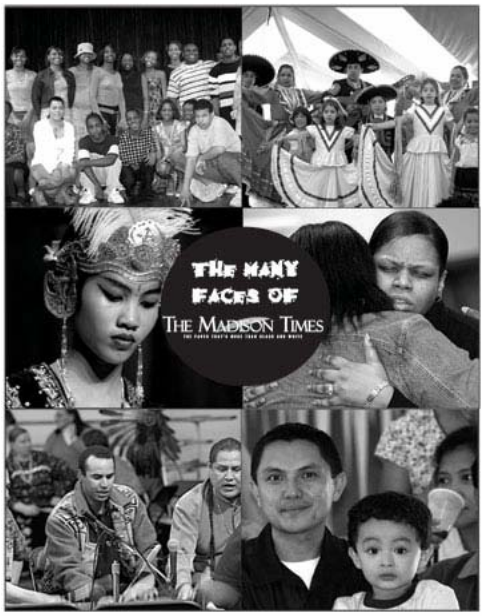
- Preparing a data analysis plan
- Sampling methodology and calculating sample size
- Planning for data entry and management
- Identifying the potential limitations of a study
- Budgets and budget justification including detailed logistics, time frame, and institutional resource base etc.
- Ethical considerations in health and population research
- Quality assurances of research
- How to prepare the references/bibliography of the research proposal

Both the HSC-508A and HSC-508B courses will include theoretical discussions on each of the topics mentioned above which are also the key components of a research protocol. Detailed discussion will also be carried out on how to write down all these topics in a research protocol with a view to maintaining scientific and ethical standards as well as fulfilling the requirements of a funding agency.

From the very beginning of HSC-508 A the students will be divided in groups and they will be preparing a research protocol. Group presentations will take place from time to time with a final presentation and submission of a research protocol at the end of HSC- 508 B. Students will also be evaluated by individual quiz and exams.

*(Note: HSC-508 A is a pre-requisite for HSC-508 B)

HSC-509: Society, Culture and Health



The primary objective of this course is to provide an overview of the social and cultural factors affecting health conditions in developing countries with a particular focus on Bangladesh. Topics to be covered include:

- Understanding the body in relation to the larger cultural context
- Understanding folk concepts of male and female life cycle- childhood, puberty, adulthood, and aging
- Cultural conceptualization of disease and illness
- Local beliefs of cause of illness
- Conceptualizing healthcare, the discrepancies between folk approaches and biomedical approaches to the prevention and care of disease
- The political economy of healthcare
- Age and gender differential in health care
- Case studies exploring the culture of silence
- Local beliefs and context of RTIs/STDs/HIV/ AIDS
- Reproductive health
- Mental health issues.

HSC-510 A and HSC-510 B: Project Design and Evaluation I & II



Nashid Kamal
Course Instructor

This course is designed as an integrative exercise which will bring together all the public health tools and skills the MPH students have acquired thus far. It will give students hands on experience in evaluating and writing health and population project proposals. Real world project proposals drawn from the government and non-government sectors and case studies from international public policy/public health teaching programs will be used as teaching tools. Critical reading and citing of the public health literature, as the evidentiary basis for proposals will be emphasized. This two month long, 30 lecture sequences will be divided into three case studies from different areas of Public Health, each lasting for 10 lectures or 5 weeks. For each case study students will be expected to respond to a real word project proposal bid (TOR) and write a project proposal. The MPH class will be divided into 3-4 groups each of whom will competitively bid in response to the TOR. At the end of each case, all the groups will make a 30-minute oral power point presentation highlighting their project proposal. Criteria for evaluation of the proposals will include the following:





Enamul Hoque
Course Instructor



Debasish Saha
Course instructor

- Identity of key objectives or hypothesis/es to be evaluated in project proposal
- Appropriateness of evaluation methods proposed
- Comprehensiveness of literature review and bibliography
- Clarity of exposition
- Credentials of key personnel
- Human rights and ethics concerns
- Inclusion of vulnerable groups
- Budgets and budget justification including detailed logistics, time frame, institutional resource base etc

*(Note: HSC-510 A is a pre-requisite for HSC-510 B)



Dipak Mitra
Course instructor

HSC-511: Intensive Introduction to Human Health and Disease

The purpose of this course is to introduce students (who have not come from a medical/dental or nursing background) to the basic concepts of human health and disease. Topics to be covered include:



- Review of the basic biology of major organ systems and health implications –brain heart, lungs, gastro-intestinal system, kidney, reproductive organs, skin etc.
- epidemiology of major health problems from a national, regional and global context
- Risk factor distribution by age, gender, economic status etc and preventive approaches
- Focus on epidemiological transition from acute to chronic diseases
- A detailed exploration of HIV, its biology, risk factors, and socio-economic consequences

HSC-512: Ethics in Public Health Research and Practice



Omar Rahman
Course Instructor

The purpose of this course is to introduce students to ethical issues and concerns in Public Health Research and Practice. Case studies will be used throughout to highlight real world situations where ethical principles need to be applied, and the difficulties faced in doing so.

HSC-513 : Culminating project / thesis:

All MPH students, in partial fulfillment of the requirement of their Masters degree in Public Health at IUB must complete a culminating project or thesis which will involve writing a significant research paper on an issue of public health importance. This project/thesis will involve relevant field work and use of secondary data and may involve some primary data collection as well.

The final project will start after successful completion of their mandatory coursework and electives. During their course work, students' interests will be identified and accordingly, they will be matched with an appropriate faculty advisor with whom they will meet on a regular basis. Students will have access to a variety of Private, Government, and Non-Government field work / training opportunities for their final project/thesis work, including UN and other multi-lateral agencies (World Bank, Asian Development Bank etc)

Students are required to produce a substantial analytical report and make a formal presentation of their report to an expert group of 3-4 members as partial fulfillment of their requirement for the M.P.H. degree.

Specializations:

Specialization I: Population and Reproductive Health:



Shah Ehsan Habib
Course Instructor

HSC-514: Migration and Health



The purpose of this course is to familiarize students with the determinants and impacts of internal and international migration and its consequences for health, population and development.

Topics to be covered include:

- Migration, theories of migration – push vs pull
- Population growth and migration
- Demographic forces in international migration
- Volume and characteristics of migration from developing countries
- Economic globalization – international division of labour, trade and immigration policy
- Emerging health challenges in the context of migration
- Migration, public health and compulsory screening
- Health worker migration and its development impact
- Socioeconomic and racial differences in health
- Migration of highly skilled persons: impact and policy issues
- Migration, adaptation and settlement experiences
- Forced migration and mental health
- Migration, refugees and health risks
- Migration and HIV/AIDS
- Women and migration: The social consequences of gender

HSC-515: Public Policies in Health, Population and Development





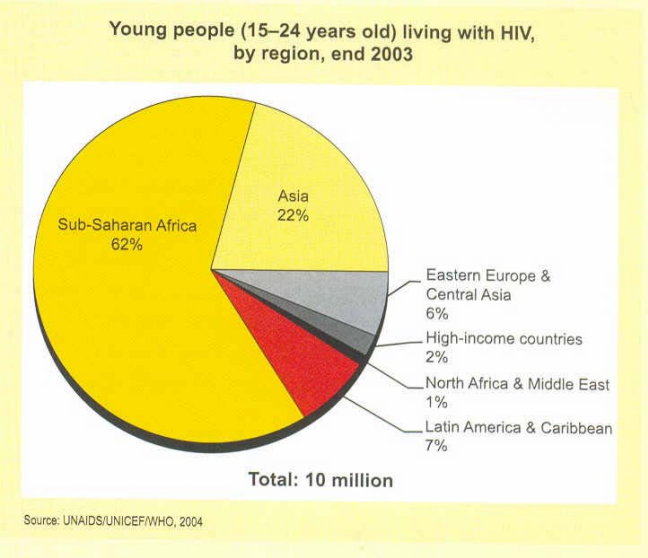
M A Mabud
Course Instructor

This course will explore the current and historical evolution of health, population and development policies in Bangladesh and developing world with a focus on identifying objectives, Criteria of Success, Constraints, opportunities, and outcome. Topics to be covered are:

- Principles of Public policy formulation-intelligence function, ethical function, consultative function etc;
- Responsive vs. influencing policies.
- Conceptual clarity of policies and their differences from the operational plan, strategic plan and programme/projects.

- How to translate Policy into an operational plan, strategy plan, programmes and project.
- Policy implications for budgeting and programming
- Formatting policies, plans, strategy documents, programs and projects.
- Interrelationships of Health, Population and Development Policies and Programmes
- Implications of population at Growth for health, education, environment economy,
- Integration of population variables in health, education, environment and other sector plans and programmes.
- Critigues on the Policies in Health, Population, Environment in Bangladesh, India, Pakistan, Sri Lanka, Indonesia, Japan, China, South Korea, Germany, Iran and USSR will be critically examined to have global perspectives and broadens students understanding of Public Health, Population and Development Policies.

HSC-516: Reproductive Health, MCH Family Planning and HIV/AIDS



The purpose of this course is to introduce students to the basic concepts of reproductive health and family planning and HIV. Topics to be covered include:



ASM Amanullah
Course Instructor

- The basic biology of reproduction and contraception
- The epidemiology of common sexually transmitted diseases—e.g. syphilis, hepatitis, gonorrhea, HIV/AIDS and STD etc.
- A detailed exploration of HIV, its biology, risk factors, and socio-economic consequences
- History and review of evidence of success of family planning programs
- ICPD and Post ICPD agendas

Specialization II: Environmental Sciences:



Ashraf M. Dewan
Course Instructor

HSC-517: Environmental and Social Impact Assessment:

The primary objective of this course is to provide an introduction to environmental impact assessment (EIA). Topics to be covered include:



- Scope, concept and needs of environmental and social impact assessment
- Role of EIA in socio economic development
- Assessment of social impacts
- Examples of EIA in selected developing countries
- EIA case studies in the fields of water resources development, industrialization, power plants, coastal areas protection, wetlands conversion, and flood protection of urban areas
- Guidelines for EIA in developing countries.

HSC-518: Natural Hazards, Risk Assessment & Disaster Management



Haroun Er Rashid
Course Instructor

This course will introduce students to the causes, effects, distribution patterns and human adjustments to natural hazards. Topics to be covered include:



- Context and methods for risk assessment
- Types of data needed for risk assessment
- Uncertainties and institutional arrangements for risk assessment
- Quantitative and qualitative approaches to the identification, characterization and control of environmental hazards to life and health
- Case studies of cyclones, floods, famines and earthquakes

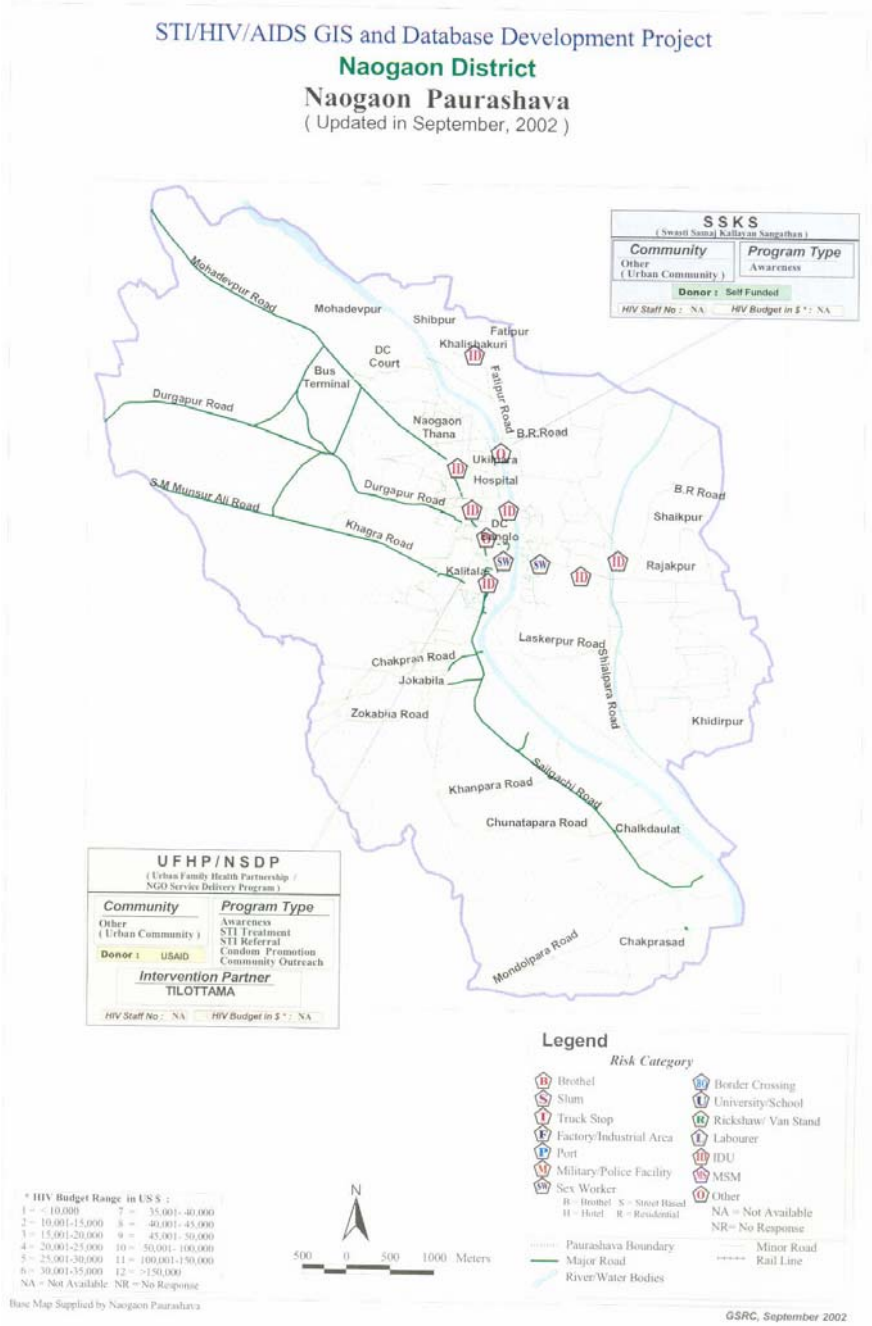


Md. Atique Iqbal Chowdhury
Course Instructor

HSC-519: Introduction to Geographic Information Systems (GIS)

The primary objective of this course is to provide an introduction to geographic information systems: Topics to be covered include:

- Introduction to remote sensing, image processing and cartography for graphic presentation
- Map design and interpretation
- Remote sensing technology, types of images and their uses
- Techniques of land use and vegetation surveys
- Introduction to Geographic Information Systems (GIS)
- Concepts, structure and application of GIS
- Hands-on experience with GIS software packages
- Geographic laboratory practicum.



Specialization IV: Psychosocial and Community Health:



Omar Rahman
Course Instructor

HSC-520: The Psycho-social dimensions of Behavioral Health

The primary objective of this course is to provide an over-view of the psychosocial dimensions of behavioral health, with a special focus on developing countries and Bangladesh in particular. Topics to be covered include:



- Epidemiology of the major classes of behavioral health problems e.g. mood disorders, anxiety disorders, psychotic disorders etc.
- Socio-economic-demographic-cultural risk factors
- Ethical issues in psycho-social health
- Potential public health strategies and approaches (individual, group and family interventions)
    - Community awareness and education strategies to sensitize and de-stigmatize these conditions
    - Critiques of Community health programmes of Bangladesh and the regions

The emphasis in this course will be on a critical analysis of the literature and extensive student presentations on focused topics in psycho-social health

HS-521: Human Communication and Behavior Change

This course explores the theories of behavioral change communication with a special focus on health. It provides an introductory perspective on communication practices towards behavior change in national and international contexts. Examining the role of human communication in everyday lives as well as in organizational and societal contexts, there will be focus on various influential models of behavior change communication. Reviewing case studies, the course critically assesses the possibility of changing behavior through communication. It will also enhance students' ability to present information effectively and persuade the audience for social and behavior change. Topics to be covered include:



Zakir Hossain Raju
Course Instructor

- Purposes and Types of Communication
- Effectiveness of Communication (intrapersonal, interpersonal and mass)
- Communication and Culture
- Perception and Self-Concept
- Persuasive Communication: Policies and Guidelines
- Theories of Behavioral Change Communication (BCC)
- Case studies on BCC for Health and Nutrition in Developing World

HS-522: Media Communication for Health and Population



Zakir Hossain Raju
Course Instructor

This course examines the role of media communication in health promotion and behavior change. It is an introduction to the theories and strategies used to promote public health messages, services or products for mass audiences. The course acquaints students with the use of mass media like TV, Radio, Film, Newspapers and the Internet in promoting health and population issues. Topics to be covered include:

- Social change and Development communication
- Mass media and Social communication
- Media, persuasion and propaganda
- Use of media in health promotion
- Using media in Population communication
- Media for environmental protection
- Selection of appropriate media for health and nutrition messages
- Techniques of message development for different media

Specialization III: Quantitative Methods in Health and Population Management:

HSC-523: Linear Regression

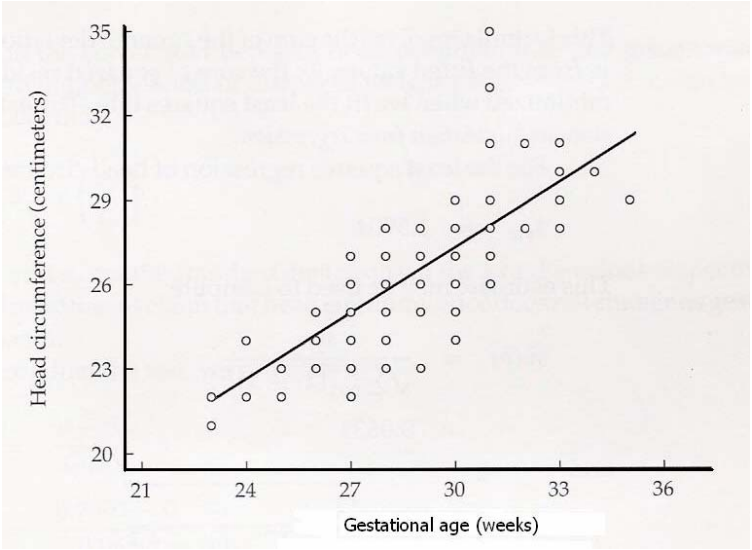


Nashid Kamal
Course Instructor

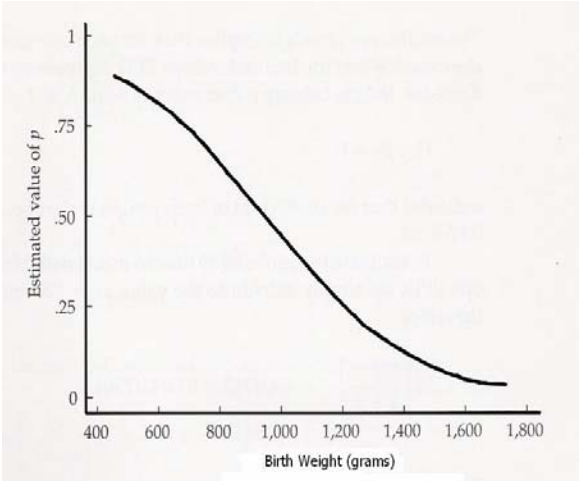
The primary objective of this course is to provide a hands-on introduction to applied multiple linear regression. Emphasis will be placed on interpreting computer output on linear regression, and developing intuition about the appropriateness, constraints and limitations of linear regression methods. Topics to be covered include:

- Gauss-Markov assumptions and their substantive meaning
- Parameter and associated confidence interval estimation
- Interpretation of interactions
- Goodness of fit
- Hypothesis testing
- Relationship to ANOVA
- A brief introduction to multi-level modeling.

Students will be given an opportunity to work through numerous health related examples and will have to use computer packages (SPSS and STATA) throughout the course.



HSC-524: Logistic Regression





Nashid Kamal
Course Instructor

The primary objective of this course is to provide a hands-on introduction to applied logistic regression. Emphasis will be placed on interpreting computer output on logistic regression, and developing intuition about the appropriateness, constraints and limitations of logistic regression methods. Topics to be covered include:

- Linear probability models and their constraints
- Odds ratios and their relationship to logistic regression
- Parameter/coefficient and associated confidence interval estimation
- Goodness of fit and log likelihood ratios
- Interpretation of coefficients as odds ratios
- Interpretation of interaction terms
- Hypothesis testing
- Testing of confounding by sequential logistic regression and
- A brief introduction to discrete time event history models

Students will be given an opportunity to work through numerous health related examples and will have to use computer packages (SPSS and or STATA) throughout the course.



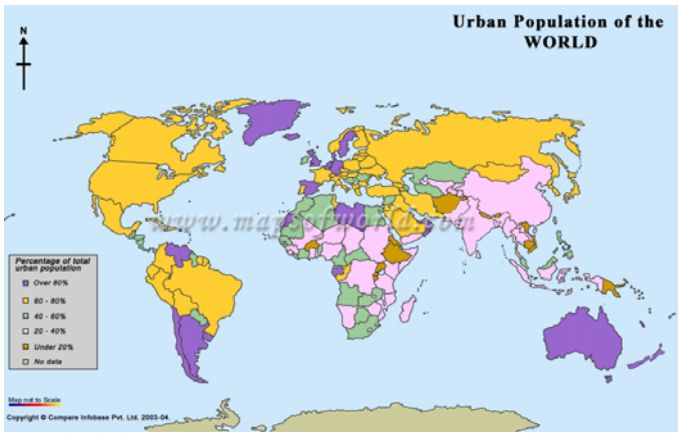
M A Mabud
Course Instructor

HSC-525: Population and Health Services Projections

The primary objective of this course is to provide some specialized projections are which very much needed in the in sector population and health services projections. Topics covered include:

- Population projections based on different variants of fertility, mortality, migration and contraceptive prevalence;
- Implications of using various computer-based projection models and techniques
- Contraceptive requirement projections;
- School population projection;
- Health human resources development (HRD) projections;
- Health resources requirement projections;
- Appropriate use of projections in policy and program planning;
- Integration of Population variables in development Policies, Plans and Programmes;

Note: students will be taught standard computerized projection models, their advantages and limitations.



14. List of Faculty Members:

Director of M.P.H. Program:



M. Omar Rahman

AB, Biochemistry (Harvard University); MD (Northwestern University Medical School); M.P.H., Health Policy and Management (Harvard School of Public Health); D.Sc, Epidemiology (Harvard School of Public Health); Board Certified in Psychiatry—(USA)

Professor of Demography
Executive Director, Centre for Health, Population and Development
Independent University, Bangladesh

Adjunct Associate Professor of Epidemiology & Demography at the Harvard School of Public Health.

Faculty:



Amanullah, ASM

BSS (Hons), MSS, PhD, HIV/AIDS, (Sydney)



Azad, Kazi Md. Abul Kalam

MSc, Statistics (University of Dhaka)



Banik, Shipra

M.Sc & B.Sc in Statistics, (Jahangirnagar University), Ph.D in Statistics, Applied and Financial Econometrics (La Trobe University, Australia)



Chowdhury, Md. Atique Iqbal

MSc, Geogr.(University of Dhaka), Mphil, GIS (University of Dhaka)



Dewan, Ashraf Mahmmood

MSc, Geography (University of Dhaka), PhD, GIS (Okayama University, Japan)



Habib, Shah Ehsan

MSc, Sociology (University of Dhaka), PhD, Sociology (University of New South Wales, Sydney, Australia)



Hoque, Mohammad Enamul
MSS, Economics (University of Dhaka), MSc, Health Economics (University of Dhaka), MPH (University of Queensland, Australia)



Kamal, Nashid
M.Sc., Statistics (Carleton University, Canada), Ph.D., Medical Demography (London School of Hygiene and Tropical Medicine);



Mabud, M. A.
M.Sc., Population Sciences (Harvard University); M.P.H. (University of California, Berkeley), Ph.D., Sociology (Boston University)



Mitra, Dipak Kumar
MPH (Harvard University), MBBS (Barishal Medical College)



Rahman, Kazi Mizanur
MBBS (Dhaka Medical College), MS, Epidemiology (Harvard University)



Raju, Zakir Hossain
PhD in Cinema Studies (La Trobe University, Australia)



Rashid, Haroun Er
M.A., Geography (Cambridge University), M.A., Economics
(Williams College, USA) with specialization in Environment Health

Director of the School of Environmental Sciences and Management, IUB



Rowshan, Dil
M.Sc., Environmental Geography (University of Dhaka), Master of Urban and Regional Planning, Disaster Mgt. & Tourism Planning (BUET)



Saha, Debasish
MS, Epidemiology (Harvard University), MBBS (Medical College, Trivandrum, Kerala, India)

MPH Office



Khan, Md. Moin Uddin
Program Manager

Office Manager, Centre for Health, Population and Development, IUB



Tooheen, Rahat Bari
Office Assistant

15. List of Students:

MPH Students 2005-2006 Batch:



Akhter, Selina

MBBS (Dhaka Medical College)
Diploma in Medical Ultrasound (State University of Bangladesh)



Alam, Mahfuza

MBBS, (University of Dhaka)



Arif Uddin, Sardar

BSS, Anthropology (Jahangirnagar University)
MSS, Anthropology (Jahangirnagar University)



Azad, Kazi Md. Abul Kalam

MSc, Statistics (University of Dhaka)
BSc, Statistics (University of Dhaka)



Gomes, Agnes
BSc, Public Health & Nutrition (Dhaka University)
Diploma in Midwifery, Midwifery (Bangladesh Nursing Council)
Diploma in Nursing, (Bangladesh Nursing Council)



Haidar, Ahmed Talat

MBBS, (Sylhet MAG Osmani Medical College)



Haider, Sareeta

BSc, Environmental Science (Independent University, Bangladesh)



Iqbal, Syed Z

B.Com, Commerce (National University, Bangladesh),
M.Com, Accounting (National University, Bangladesh),
MBA, Marketing (Asian University of Bangladesh)



Khan, Farzana

MBBS, Medicine & Gynecology (Chittagong Medical College)



Khan, Tina Shahrin

BSc, Business Management (Touro College, Mosco)



Mohsena, Masuda

MBBS (Sir Salimullah Medical College)



Noor, Tanzira

BSc (Hons), Food & Nutrition (University of Dhaka),
MSc, Food & Nutrition (University of Dhaka)



Rahman, Fatima Alhaan

BSc, Environmental Studies (North South University)



Siddique, Shah Alam

BSc, Agriculture Economics (Bangladesh Agriculture University)
MS, Agriculture Production Economics (Bangladesh Agricultural University)



Sultana, Nadira

MBBS, (Bangladesh Medical College)



Sultana, Shima

BHMS (Govt. Homeopathic medical college and Hospital)



Tooheen, Rahat Bari

BSc, Population (Independent University, Bangladesh)



Wycoco, Alicia

MBBS, (Far Eastern University, Philippines)
Bachelor of Science in Zoology (Far Eastern University, Philippines)



Zaman, Jesmin

MBBS, (Sikder Womens Medical College)



MPH Orientation Program 2005














SEMINA ERIES
Centre for Health,
INDEPENDENT UNIVE







IUB Campus, Bashundhara



MPH Office:

House #27, Road #12, Baridhara, Dhaka-1212

Visit us at our Web-site: www.iub.edu.bd/chpd/mph.htm

Or call : Tel: 880-2-9884498, 9881917, 9862386-90, ext 223

Email: orahman@iub.edu.bd; nipon04@iub.edu.bd