

# Masters in Public Health (MPH)

---

## **Syllabus and Curriculum for the 2013-2014 Batch**

**North East University Bangladesh**

## **Introduction to MPH Programme**

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.

North East University Bangladesh is pleased to offer the following post-graduate program leading to the Master of Public Health (M.P.H.) for the first time in greater Sylhet region.

## **The Objectives**

Among the overall educational objectives for all graduates of the School is the development of individual competence and improved skills, particularly in (1) recognizing and defining public health problems, setting priorities, and using scientific approaches to problem solving; (2) accumulating appropriate data information, analyzing and interpreting findings, and assessing relevance and validity; and (3) communicating effectively with colleagues and a variety of groups involved in delivering health services.

### **THE MAJOR COURSE OBJECTIVES ARE:**

- to provide the highest level of education to public health scientists, practitioners, and leaders
- to foster new discoveries leading to improved health for the people of this country and all nations
- to strengthen health capacities and services for communities
- to inform policy debate, disseminate health information, and increase awareness of public health as a public good and fundamental right.

The master of public health (MPH) degree is the most widely recognized professional credential for leadership in public health. The program emphasizes active, student-directed learning, problem solving, and the acquisition of skills essential to the practice of public health. For many candidates, the MPH will not be their first professional degree. Many students enter the MPH degree program with previous master's or doctoral degrees or with varying years of practical experience in professional fields related to public health. Graduates of medical, nursing, dental, and other clinical programs, and applicants who have earned master's or doctoral degrees in other health-related areas, or in other academic or professional areas, will find their academic backgrounds well suited to this program.

## **ADMISSION REQUIREMENTS**

The minimum qualifications for admission to Graduate programs are:

### Academic Qualifications

1. Bachelors degree in Medicine and Surgery (MBBS) or equivalent professional degree in alternate medicine, dentistry or Doctor of Medicine (MD) from any recognized national and overseas university with at least two years of practical exposure in the professional field. The doctor must have to be registered with Bangladesh medical and Dental Council/ National Registration Authority

or

2. Four-year undergraduate degree from a recognized university with a grade point average of 2.5 or more on a scale of 4.0 in social sciences, anthropology and economics,

or

3. Three-year bachelors' degree with honors, with at least a second class in social sciences, anthropology and psychology

or

4. Master degree in a health related subject or in any social science and science subjects with an experience of working in health related fields

or

5. A two years graduation in nursing from any recognized university after duly completed four years registered nursing course from government recognized institutes. Students other than medical graduated may required to appear before Medical Background Examination Committee to prove their understanding about human health and diseases. They may require to take additional preparatory courses at NSU even after qualifying the test.

The candidate must qualify in an admission application consisting of a statement containing the perspective and goal of the candidate in the field of public health as well as undergo an interview.

An entrance exam designed to measure basic writing, numeric and logical skills may be required of all students.

### Course work

The 52 credits of coursework required for the MPH degree include core courses; programme required courses, and usually some electives Core Courses (Total 52 credits: Total course work to be completed by 4 semesters):

The core curriculum required for all MPH candidates is comprised of courses in Biostatistics, Environmental Health Sciences, Epidemiology, Health Policy and Management, and Behavioural and Health Communication Sciences. These courses provide a common body of knowledge in basic public health philosophy and practice, and are required of all candidates for the MPH degree regardless of previous training, professional interests career objectives, or program concentration. By successfully completing a waiver examination in a core area, a student may be permitted to substitute a course in the same or another area. The 27 credit can be complete in 3 semester.

Programme (Elective) Courses (Total 10 credits: to be completed by 1 semester) : These courses provide a series of educational experiences focusing on specific public health areas and offer students opportunities to concentrate on particular issues, skills, interests, or career goals. All candidates for the MPH degree are expected to select one of the following programs and to follow the prescribed program of study within that area:

Epidemiology,

Public Health Management,

Behavioural Sciences and Health Communication,

Reproductive Health and Environmental Health Sciences.

Nutrition.

Applicants must indicate on the application form which concentration they would like to pursue. Each of these areas of concentration has specific educational objectives, requirements, and methods of study.

**Elective Courses:** Elective courses may be selected from within a student's area of concentration or in a related field, and from courses offered within the programme or in other parts of the University. Most elective credits are earned in formal courses; some may be earned on a tutorial (independent study) basis. The choice of electives is made with the approval of the student's faculty advisor.

**PRACTICUM (PRACTICAL EXPERIENCE)** [Total credit 3 hours: Course works: to be completed within a semester together with any other course]

All MPH degree candidates must meet a practical experience requirement equivalent in time and effort to a minimum of one academic term. The practicum provides educational opportunities that are different from, and supplementary to, the more academic aspects of the program. The focus, content, approach, and timing of the practicum vary with the major courses and with the particular needs of each student. For example, it may take the form of field or agency observations; placement in an administrative, research, or clinical setting; participation in ongoing research or program activities; or independent study. It may be completed before or after the final term of academic work, or be integrated into the academic program. Students must consult with the course in-charges or practicum advisor to assure satisfying the requirement.

**Special Study** (Total 3 credits hours: to be completed in one semester together with any other course) : All MPH student must submit a report on their own experience through evaluating any current public health issues putting recommendation depending on the observation of such programme if any recently on going in their country.

**Dissertation** (Total 10 credits hours: to be completed by one semester together with any other course): All MPH students the student will conduct a field research in their chosen public health field and will write a masters level dissertation. Planning for this work will be initiated during the elective period along with a faculty advisor. Fieldwork can be done in Bangladesh or in home country for international students. Synopsis of Research topic must be approved by Dissertation committee of the MPH programme before commencing the research work.

## **MPH with Major areas**

- MPH in Epidemiology
- MPH in Public Health Management
- MPH in Behavioural Sciences and Health Communication
- MPH in Reproductive and Child Health
- MPH in Nutrition

## Outline of the MPH Course Curriculum

Description of required courses	No. of courses	Total Credits
Introduction to Public Health	1	NC (courses content may differ for different groups of entering students)*
Core courses for all Major course areas	12	27
Elective courses in Major Program Areas	5	10
Field Assignment		2
Dissertation		10
Practicum or internship		3
Total		52

\* Introduction to Public Health (for non health professionals) will comprise a week of lectures and readings to familiarize students to basic vocabulary, concepts and biomedical fundamentals of public health. It is designed to enable students from non-health disciplines to participate fully in the academic program along side health professionals. Introduction to Public Health encompasses the orientation of public health scenario of Bangladesh including the cultural, historical, political, religious aspects of living that constantly influence the health aspect of Bangladesh.

## Course Information

### GENERAL

Courses are reviewed and new courses approved throughout each academic year. Courses are grouped in this Bulletin under Department or Program to provide a general guide to the perspective from which the course is taught.

The University reserves the right to withdraw, add to, or modify the courses of instruction or to change the instructors or scheduling at any time.

### KEY TO COURSE NUMBERS

Each course number consists of the capital letter ‘PBH’ followed by four digits.

The first digit indicates the level of the course as follows:

6 Master’s level course

The second digit indicates the subject area of the course:

0 General Public Health

1 Biostatistics

2 Population and Family Health

3 Environmental Health Sciences

4 Epidemiology

- 5 Public Health Management
  - 6 Behavioural Sciences and Health Communication
  - 7 Reproductive and Child Health
  - 8 Public Health Nutrition
  - 9 Doctoral research
- The last one digit identifies that particular course of that subject.

## Overview and Degree Programs, MPH Catalog 2012-2013

CORE COURSES (Total 27 credits: Total course work 2 semester)

Following courses are core courses and students have to enroll for all the courses below:

Course Title	Credits
PBH601 Social and Behavioral Aspects of Public Health	3
PBH641 Epidemiology	2
PBH642 Epidemiology & Management of Communicable Diseases and Non-Communicable Diseases Programs	2
PBH611 Biostatistics	3
PBH651 Health Economics & Health Care Financing	2
PBH671 Population Sciences	2
PBH672 Women & Child Health and Gender Issues	2
PBH652 Health System & Policies in Public Health	2
PBH631 Occupational health hazards and occupational health safety	2
PBH681 Nutrition and Food Safety in Public Health	2
PBH612 Research Methodology	3
PBH661 Health Communication and Behavior Change Communication	2
<b>Core Course totals</b>	<b>27</b>

### Elective Courses

Elective Courses: (Total 10 credits: Total course work 1 semester)

Prerequisite: core courses. Student will choose 5 courses from the following concentration areas.

Course Title	Credits
<b>Epidemiology in Public Health Practice</b>	
PBH643 Principle of Epidemiology	2
PBH644 Measurements in Epidemiology	2
PBH645 Epidemiological designs	2
PBH646 Nutritional Epidemiology	2
PBH647 Cancer Epidemiology	2
<b>Public Health Management</b>	
PBH652 Principle of Management	2
PBH654 Public health and hospital management	2
PBH655 Public Health Ethics and Legislation	2
PBH656 Communication in Health System and in hospitals	2
PBH657 Community Health and Primary Health Care	2
PBH658 Health leadership: role and responsibilities	2

<b>Behavioural sciences and Health Communication</b>	
PBH661 Introduction to Behavioural Sciences and its importance in Public Health	2
PBH662 Medical anthropology and belief model	2
PBH663 Illness behaviour	2
PBH664 Theory of communication and level of communication	2
PBH665 Motivation and behavioural change	2
PBH666 Doctor –patient relationship and breaking bad news	2
<b>Reproductive and Child health including family Planning</b>	
PBH671 Concept of Reproductive and Child Health	2
PBH672 Emergency obstetric care delivery system	2
PBH673 Safe motherhood initiative and component	2
PBH674 Gender issue in Reproductive Health	2
PBH675 Violence against women and its prevention	2
PBH676 Growth of child, child’s nutrition	2
PBH677 Child abuse and prevention	2
PBH678 Population control and use of contraceptives	2
PBH679 Infertility	2
<b>Public Health Nutrition</b>	
PBH681 Fundamental Biochemistry	2
PBH682 Nutrition problem in Bangladesh	2
PBH683 Nutritional Diseases and its prevention	2
PBH684 Assessment of nutritional status	2
PBH685 Food safety and hygiene	2
<b>Total</b>	<b>10</b>

## Special Study

The following courses are obligatory courses for all MPH students: (Total study course is 1 semester)

Course Title	Credits
<b>Special Study</b>	
PBH608 Special study on a Public Health issue (in depth experience in a single operating program)	3
<b>PBH888 Dissertation</b> (guided research design, data collection, analysis, interpretation and presentation)	10
PBH855 <b>Practicum</b> or Inteernship (with Health agency posting or home agency)	2
Total	15
<b>Total credits for MPH</b>	<b>52</b>

## Teaching Plan for MPH program

PBH601 Social and Behavioral Aspects of Public Health	3 credit
<p><b>Aim:</b> This module explains the normal structure and function of the human body in a system wise classification. It also thematically highlights the diseases and conditions that are of concern to a future Public Health professional. It also highlights the social and behavioral issues in Public Health.</p>	
<p><b>Key Topics</b></p>	<p>Public Health Biology</p> <ul style="list-style-type: none"> <li>• Principles Of Immunology and Role Of Nutrition</li> <li>• Communicable Diseases And Emerging Infections</li> <li>• Non Communicable And Lifestyle Diseases Evidence Based Medicine</li> <li>• National and global Disease Control Programmes</li> <li>• Stakeholders in Public Health including NGO's and Social Support Networks</li> <li>• Theories, research, and practice models at varying social ecological levels, including the intra-individual, inter-individual</li> </ul>
<p><b>Course Content</b></p>	<p>Basic Human Anatomy and Physiology</p> <ul style="list-style-type: none"> <li>• Difference between Medicine and Public Health Medicine</li> <li>• Disease pathogenesis, diagnosis, diagnostic techniques and management of communicable and non – communicable diseases which are of high burden to the society.</li> <li>• Basic concepts of immunology, immunity to infection and role of vaccination</li> <li>• System wise outlook of Medicine and Significant Public Health Issues</li> <li>• Assess implementation of interventions and understand reasons for their strengths and weaknesses.</li> <li>• Highlight the role of epidemiology in medicine and introduce evidence based medicine.</li> <li>• Health inequalities, the extent to which health care contributes, or fails to contribute to, population health, and how to determine the effects on health of policies in other sectors such as the environment.</li> <li>• Concepts and measurement of equity and inequity in Health Concepts and principles of health impact assessment,</li> <li>• Changing paradigms of health and health care, Making health and health care universally accessible.</li> <li>• National Health Systems</li> <li>• Conflict and disaster management</li> </ul>
<p><i>Books :</i> 1. Health Behavior &amp; Health Ed; Theory, Research &amp; Practice by Glanz, Rimer <b>Publisher</b> Jossey-Bass,4th Ed <b>ISBN #</b> 9780787996147                  2. DiClemente, R. J., Crosby, R. A., &amp; Kegler, M. C. (2002). <i>Emerging Theories in Health Promotion Practice and Research: Strategies for Improving Public Health.</i> John Wiley &amp; Sons, Inc 3. Baggot,R, (2000) Public Health: Policy and politics Basingstoke : Palgrave Macmillan.                  4. Kleinman A, Eisenberg L, Good B. Culture, illness, and care. <i>Annals of Internal Medicine</i> 1978;88:251-258 .                  5. White, K, (2002) An introduction to the sociology of Health and Illness, London:Sage</p>	

PBH641 Epidemiology	2 credit
<i>Aim: To provide an introduction to the basic concepts and methods of Epidemiology and to highlight Inter-relationship between epidemiology and medicine to understand evidence based medicine.</i>	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Fundamentals Of Epidemiology</li> <li>• Epidemiologic Study Design And Analysis</li> <li>• Methodological Challenges In Epidemiologic Research</li> <li>• Epidemiological Inferences In epidemics and Outbreak Investigations</li> <li>• Critical Analysis of Published Epidemiological Studies</li> <li>• Disease Surveillance Clinical/ Field trial methodology</li> </ul>
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Basic Concepts / Basics of Epidemiology</li> <li>• Introduction</li> <li>• Measuring the occurrence of diseases <ul style="list-style-type: none"> <li>o Measures of Morbidity (Incidence, Prevalence)</li> <li>o Measures of Mortality (Mortality Rates)</li> </ul> </li> <li>• Measures of Prognosis <ul style="list-style-type: none"> <li>o Case Fatality rate</li> <li>o Five Year Survival</li> <li>o Observed Survival (Life Table)</li> <li>o Median Survival Time</li> <li>o Relative Survival Time</li> </ul> </li> <li>• Measurement of Risk <ul style="list-style-type: none"> <li>o Relative Risk</li> <li>o Odds Ratio</li> <li>o Attributable Risk</li> </ul> </li> <li>• Epidemiological study design and Analysis:</li> <li>• Study Design: Cross sectional, cohort, case control and intervention studies</li> <li>• Assess strengths and limitations of different study designs</li> <li>• association and Causation</li> <li>• Causality, random errors, Bias, Interaction and Confounding factors</li> <li>• Methods for assessment of Effect Modification</li> <li>• Strategies to allow / adjust for confounding in design and analysis</li> <li>• Design, application, strength and weakness of studies</li> <li>• Concepts of Validity and Reliability(Causation and Casual interference)</li> <li>• Preventive Strategies:</li> <li>• Concepts of Screening,</li> <li>• Disease Surveillance.</li> <li>• Out break investigation,</li> <li>• Benefits and limitations of different forms of</li> </ul>

	<p>epidemiological evidence in formulating policy decisions</p> <ul style="list-style-type: none"> <li>• Interpretations of published epidemiological studies</li> </ul>
<p><i>Books: 1. Epidemiology for Public Health Practice Authors : R. Friis, &amp; T. Sellers Publisher: Jones and Bartlett Pub ISBN # 9780763789688 2. Friss, H.R., &amp; Seller T.A., (2004). Epidemiology for Public Health Practice. 3rd Edition, Jones and Bartlett Publishers. 3. Benenson, A.S. (1990). Control of Communicable Disease in Man. American Public Health Association. 4. Liliensfeld, A.M., &amp; Liliensfeld, D.E. (1980). Foundation of Epidemiology. 2nd Edition. Oxford University Press. 5. Last, J.M. (Editor). (1995). A Dictionary of Epidemiology. 3rd Edition, Oxford University Press.</i></p>	

PBH642 Epidemiology & Management of Communicable Diseases and Non-Communicable Diseases Programs		2 credit
<p><i>Aim: To provide students with an understanding of the scope of the public health issues with regard to communicable disease and non-communicable diseases in India and also provide them with the overview with the national health programs that have been designed to address these issues.</i></p>		
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Classification of various communicable and non-communicable diseases and also appreciate the modes of evolution of disease stages.</li> <li>• Burden of Communicable and non-communicable diseases</li> <li>• Policies and programs used in the control of important communicable and non-communicable diseases,</li> <li>• Issues involved in their implementation and evaluation;</li> <li>• Appreciate the issues involved in managing and evaluating various National health programs</li> </ul>	
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Classification of diseases</li> <li>• Burden of diseases</li> <li>• Disease cycle / transmission</li> <li>• Millennium Development goals</li> <li>• National Health programs</li> <li>• Communicable diseases</li> <li>• Non-communicable disease</li> </ul>	
<p><i>Books: 1. Epidemiology for Public Health Practice Authors : R. Friis, &amp; T. Sellers Publisher: Jones and Bartlett Pub ISBN # 9780763789688 2. Friss, H.R., &amp; Seller T.A., (2004). Epidemiology for Public Health Practice. 3rd Edition, Jones and Bartlett Publishers. 3. Benenson, A.S. (1990). Control of Communicable Disease in Man. American Public Health Association. 4. Liliensfeld, A.M., &amp; Liliensfeld, D.E. (1980). Foundation of Epidemiology. 2nd Edition. Oxford University Press. 5. Last, J.M. (Editor). (1995). A Dictionary of Epidemiology. 3rd Edition, Oxford University Press.</i></p>		
PBH611 Biostatistics		3 Credits
<p><i>Aim: To introduce the basic statistical methods used in public health research. As part of this introduction, students will learn to make practical use of statistical computer packages.</i></p>		

<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Principles Of Biostatistics and Organization of Data</li> <li>• Properties of measurement, Statistical Procedures and Analysis</li> <li>• Sampling</li> <li>• Developing indices, Measuring Reliability and validity, Life-Tables And Vital Statistics</li> <li>• Analysis of data Statistical Methods and SPSS Application</li> </ul>
<b>Course content</b>	<ul style="list-style-type: none"> <li>• Organization of data - Primary and Secondary</li> <li>• sources of data – Nature and functions of primary and Secondary data. Difference between scores and other non-score data.</li> <li>• Properties of measurement - Measuring and interpretation of score/ other data – Methods of scaling – Nominal, Ordinal, Ratio and Interval scale.</li> <li>• Developing indices - Nature and function of an Index. Building composite scales- simple and weighted scale – Developing weighted scores by Statistical</li> <li>• Methods – Data Reduction techniques.</li> <li>• Measuring Reliability and validity of scales and such scales.</li> <li>• Statistical Methods and Application through SPSS processing.</li> <li>• Data Organization – Raw data files and Matrix data files.</li> <li>• Transformation and Manipulation of SPSS file.</li> <li>• Statistical Procedures. <ul style="list-style-type: none"> <li>- Descriptive Statistics</li> <li>- Univariate Statistics</li> <li>- Bi variate Statistics.</li> <li>- Multivariate Statistics.</li> </ul> </li> </ul>
<p><i>Books: Basic Statistics for the Health Sciences (2007) by Jan W Kuzma, and Stephen Bohnenblust: Edition 5; ISBN10: 0072844035; ISBN13: 9780072844030. Year Published: 2005. Publisher: McGraw-Hill Publishing 2. Zar, J.H. (1999). Biostatistical Analysis. 4th Edition, Prentice Hall.3. D Colqhoun (1971), Introduction Biostatistics : An introduction to statistics with Application in Biology and Medicine, Clarendon Press, Oxford.</i></p>	

PBH651 Health Economics & Health Care Financing	2 credits
<p><b>Aim:</b> To introduce economic ideas that can be used in pursuit of better health and health care. Students will be helped to appraise strengths and limitations of these ideas.</p>	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Basics Of Health Economics And Financing</li> <li>• Sector Reforms</li> <li>• Fundamentals Of Budgeting And Financial Management</li> <li>• Cost-Benefit Analysis: Theory &amp; Techniques</li> <li>• Health Care Financing – Case Studies</li> <li>• Medical Insurance and Public Private Partnerships.</li> </ul>

<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Analyze determinants of demand, supply and costs of health service</li> <li>• Apply the concepts of elasticity, marginal analysis and opportunity cost</li> <li>• Understand the basic market model in different aspects of health care, cases of market failure, roles and limitations of market and government in the finance and organization of health care</li> <li>• Understand how different health systems generate incentives to the society, and the likely outcomes in terms of efficiency and equity</li> <li>• Understand issues in measurement of costs and benefits of health care</li> <li>• Understand the principles of economic evaluation as applied to health care</li> <li>• Cost effectiveness analysis in health care interventions</li> <li>• Quality of life and statistics in health economic evaluation including QALY's and DALY's</li> </ul>
Books:	

PBH671 Population Sciences	2 credits
<i>Aim: To present students some basic techniques and concepts in population sciences.</i>	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Concepts Of Population And Development</li> <li>• Sources Of Data</li> <li>• Mortality, Morbidity And Fertility</li> <li>• Model Life Tables and Indirect Methods of Estimating Vital statistics.</li> <li>• Migration, Population Growth, Ageing, Problems, Projections</li> </ul>
<b>Course content</b>	<ul style="list-style-type: none"> <li>• Concepts of Population and Development <ul style="list-style-type: none"> <li>o Meaning, Nature and scope of demography,</li> <li>o population growth, structure, characteristics and distribution;</li> </ul> </li> <li>• Components of population change, Demographic Transition</li> <li>• Sources of data :Census, surveys and registries - objectives and components</li> <li>• Fertility – Concept and definitions of basic terms like Fecundity, Sub-fecundity, fertility, conception, pregnancy, abortion, still-birth, live-birth, menarche, menstrual cycle, menopause, family size, sources of fertility data and their limitations. Measures of Fertility factors effecting fertility</li> <li>• Mortality - Basic concepts, importance, sources of mortality data and errors in death statistic and measurement of errors; Mortality measures: Crude death rates, specific death rates by</li> </ul>

	<p>age, sex, causes of death, marital status and other characteristics; standardized rates; Life tables: Meaning, assumptions, type, functions and uses of life tables, construction of life tables from census data, mortality comparisons; multiple decrement life tables and cause specific life tables.</p> <ul style="list-style-type: none"> <li>• Migration</li> <li>• Ageing Population</li> <li>• Population growth and projections</li> </ul>
Books:	

PBH672 Women & Child Health and Gender Issues		2 credits
<p><i>Aim: To impart an understanding of the scope of women and child health and to enable students to find and interpret relevant information on women and child health</i></p>		
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Women’s Health – Concepts, Definition And Measures Customs, Norms, Attitudes And Practices In India</li> <li>• Adolescent Sexual Health And Family Planning</li> <li>• RTI’s , STI And HIV/AIDS</li> <li>• Millennium Development Goals And Government Programs In Reproductive Health</li> </ul>	
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Women’s Health – concepts, definition and measures.</li> <li>• Customs, norms, attitudes and practices pertaining to various aspects of women’s health including menstruation, puberty, childbirth and menopause; sexual and reproductive rights; infertility</li> <li>• Adolescent Sexual Health &amp; Contraception</li> <li>• Role and involvement of men in RH.</li> <li>• Methods of Family Planning</li> <li>• Health Benefits of Family Planning</li> <li>• Contraceptive Behavior, Measurement &amp; Service Delivery</li> <li>• Quality of Family Planning Care</li> <li>• Gender, autonomy, empowerment and status of women, domestic violence in India</li> <li>• Maternal morbidity and mortality.</li> <li>• Abortion, Family Planning</li> <li>• RTIs &amp; STIs and HIV/AIDS</li> <li>• Response of Govt. to Issues of Millennium Development Goals in the context of women and child health.</li> </ul>	

PBH652 Health System & Policies in Public Health	Credits 2
<b><i>Aim:</i></b> To introduce students the different types of services and different levels in health care delivery.	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Policy Making Process, With Historical, Ethical, Legal And Political Realities</li> <li>• Basic Model And Function Of Health Service</li> <li>• Indigenous Systems Of Medicine</li> <li>• International Health</li> <li>• Persistent and Widespread Issues In Providing Health Services</li> <li>• Standard Frameworks For Policy Analysis</li> </ul>
<b>Course Content</b>	<p>Policy:</p> <ul style="list-style-type: none"> <li>• Understanding, need and goals for various policies related to public health - Health policy, population policy, nutritional policy, research policy, women policy, child policy etc.</li> <li>• Policy environment</li> <li>• Methods to assess the needs of for the policy development / assessment process.</li> <li>• Frameworks for policy analysis, applying these to the assessment of current policies.</li> <li>• Factors influencing the policy: external factors (interest groups as one example), politics and the like.</li> <li>• Health care system: <ul style="list-style-type: none"> <li>o Primary Health Care institutions (sub-centers, primary health centers, community health centers, district hospitals),</li> <li>o Teaching hospitals, specialist hospitals, and health insurance schemes like Employees State Insurance and Central Government Health Scheme, defense health services, Railway health services.</li> </ul> </li> <li>• Private Health care system: Private hospitals, Polyclinics, Nursing homes and dispensaries, one-doctor practices; Major voluntary health agencies;</li> <li>• Planning at Central, State, District, Block and Village levels like Union Ministry of Health and Family Welfare, Directorate General of Health Services, Central Council of Health, State Ministry of Health, State Health Directorate, District Health Organization etc</li> <li>• Private health sector entities like private hospitals, polyclinics, nursing homes and dispensaries, one-doctor practices; Major voluntary health agencies;</li> <li>• Indigenous systems like Ayurveda, Homeopathy and</li> </ul>

	<p>Unani.</p> <ul style="list-style-type: none"> <li>• Guided visits to one institution in each of the following category viz. PHC, CHC, Taluk Hospital, General Hospital, sub-centre and Anganwadi are undertaken to help the learning process</li> <li>• Health Care Delivery Structure: <ul style="list-style-type: none"> <li>o Central : State, District, Block and Village levels like Union Ministry of Health and Family Welfare, Directorate General of Health Services, Central Council of Health,</li> <li>o State level : Ministry of Health, State Health Directorate, District Health Organization etc</li> <li>o In-sectoral co-ordination</li> </ul> </li> <li>• International Health: Health care systems in developing countries and developing countries</li> </ul>
--	--

*Books: 1. Baggott, R. (2000) Public Health: Policy and Politics. Palgrave, London. 2. Hunter, DJ (2003) Public Health Policy. Oxford: Blackwell Publishing Ltd. 3. World Health Organisation (1999) Health-21: The Health for All policy framework for the WHO European Region. Copenhagen: World Health Organisation*

PBH681 Nutrition and Food Safety in Public Health	Credits 2
<i>Aim: This module covers the basics of human and community nutrition. Issues related to food safety are also covered.</i>	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Principles Of Nutrition</li> <li>• Disease Specific Nutrition</li> <li>• Community Nutrition And Nutritional Assessment</li> <li>• Policy And Programmes For Nutrition Related Issues</li> <li>• Food Safety</li> </ul>
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Basics of Nutrition: Importance of nutrition, meal pattern and balanced diet for preschooler school going children, adolescents, pregnant &amp; lactating mothers, old age, athletes, space nutrition</li> <li>• Disease specific Nutrition: Diet modifications during various diseased condition diabetes, obesity, heart diseases, civil and kidney, TB, HIV</li> <li>• Community Nutrition: Deficiency disorders and dietary management – PCM, anemia, goiter and vitamin &amp; mineral deficiency. Prevalence of under nutrition and malnutrition in India – Assessment of nutritional status – anthropometric measurements – clinical examination delay survey – malnutrition infection and infestation effect of malnutrition in infancies, pregnant &amp; nursing mothers – Nutrition organization programmes – National , international &amp; voluntary organizations – undertaken to combat malnutrition</li> <li>• Policy and programmes for nutrition related Issues</li> <li>• Food Safety: General principles of hygiene – importance of food borne illness – prevention of contamination, food toxicants, food additives, adulteration and food standards – Importance of safe drinking water – purification methods.</li> </ul>
Books:	

PBH 612 Research Methodology		Credits 2
<i>Aim: The students will be able understand various steps research able to design and develop research proposals</i>		
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>• Quantitative And Qualitative</li> <li>• Data Management: Packages For Analysis – Quantitative And Qualitative</li> <li>• Health Care Organizations : Public Health System And Its Boundaries</li> <li>• Comparative Health Systems</li> </ul>	
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Basics of Research - Definitions and designs</li> <li>• Uses of Research in public health</li> <li>• Formulation of research problems</li> <li>• Developing hypothesis</li> <li>• Writing research questions</li> <li>• Sampling: How much sample and how to choose , principles of sampling and terminology</li> <li>• Design and development of Interview schedule, questionnaire construction, pre-testing (reliability and validity)</li> <li>• Research ethics (protection of human subjects) ,</li> <li>• Data collection – Filed work, mapping and listing operations, selecting of respondents and MIS for major research projects</li> <li>• Data management - editing, entry and preparing data sets for analysis</li> <li>• Data analysis using spss/epi. Info/stata</li> <li>• Qualitative research <ul style="list-style-type: none"> <li>- Development of conceptual framework,</li> <li>- Qualitative methods: FGDs, indepth interviews, biographies, participatory methods, participant observation etc..</li> <li>- Data collection, recording</li> </ul> </li> <li>Data analysis (manual and computer based using QSR)</li> </ul>	
<p><i>Books: Research Methodology: A Stepby- Step Guide for Beginners by Ranjit Kumar <b>Publisher</b> : Sage Publication, second edition, ISBN # 9781412911948</i></p>		

PBH661 Health Communication and Behavior Change Communication		Credits 2
<i>Aim: The purpose of this model is to introduce different models of communication for use in health promotion activities and also in community based health activities.</i>		

<b>Key Topics</b>	<ul style="list-style-type: none"> <li>▪ Basics Of Communication</li> <li>▪ Behavioral Change Model,</li> <li>▪ BCC, Monitoring Behavioral Change</li> <li>▪ Communication Research</li> </ul>
<b>Course Content</b>	<ul style="list-style-type: none"> <li>• Communication Process, Function and Types <ul style="list-style-type: none"> <li>o Barriers to communication</li> <li>o Mass Communication</li> <li>o Communication Skills</li> </ul> </li> <li>• Community Participation <ul style="list-style-type: none"> <li>o Concepts and Types</li> </ul> </li> <li>• Information, Education and Communication <ul style="list-style-type: none"> <li>o IEC in Health and Family Welfare</li> <li>o IEC structure in districts</li> <li>o Innovative strategies and evaluation</li> </ul> </li> <li>• Behavioral Change Communication <ul style="list-style-type: none"> <li>o Best practices and strategic approaches</li> <li>o BCC framework, implementation strategy</li> </ul> </li> <li>• Target Audience Segmentation <ul style="list-style-type: none"> <li>o Different approaches to target audience</li> </ul> </li> <li>• Physician – Patient Communication <ul style="list-style-type: none"> <li>o Why and how of physician – patient relationship</li> </ul> </li> <li>• Data for IEC Planning</li> <li>• Relationship Management</li> </ul>
<p><i>Books:1. Corcoran, N(ed) (2007), Communicating Health : Strategies for health promotion sage, London 2. Baggot,R, (2000) Public Health: Policy and politics Basingstoke : Palgrave Macmillan. 3. Kleinman A, Eisenberg L, Good B. Culture, illness, and care. Annals of Internal Medicine 1978;88:251-258</i></p>	

PBH631Occupational health hazards and occupational health safety	Credit 2
<p><i>Aim: provides the knowledge and skills necessary to investigate and manage these occupational health hazards, in an effort to reduce their exposure and promote healthy living.</i></p>	
<b>Key Topics</b>	<ul style="list-style-type: none"> <li>▪ Occupational and Environmental Diseases</li> <li>▪ occupational hygiene and hazardous substances</li> <li>▪ Controlling occupational environments</li> <li>▪ Workplace hazards</li> <li>▪ Identifying Safety and Health Hazards</li> </ul>

<b>Course Content</b>	<ul style="list-style-type: none"> <li>▪ Introduction to environmental and occupational health</li> <li>▪ Fundamentals of occupational hygiene and hazardous substances</li> <li>▪ Risk assessment and management</li> <li>▪ Measurement of hazardous substances</li> <li>▪ Ergonomics, manual work and physical agents</li> <li>▪ Controlling occupational environments</li> <li>▪ Occupational safety, physical hazards and biohazards</li> <li>▪ Occupational hygiene field work and occupational health legislation</li> </ul>
<p><i>Books: Yassi, A. (2001) Basic Environmental Health Oxford University Press, USA. ISBN: 978-0195135589</i></p>	

### **Marks Distribution**

Class attendance : 5 marks

Class performance : 5 Marks

Assignments: 10 Marks

Mid Term examination: 30 Marks

Semester Final Examination : 50 Marks

Total : 100marks

There will be 100 marks written examination for all courses (12 + 5 =17 courses ).

There will be a Viva examination for **Dissertation**.