### SYLLABUS

#### MASTER OF PUBLIC HEALTH

**SESSION 2013 - 2015**

#### First year

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#### Second year

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**MPH11: Epidemiology**

- Recent development in epidemiology
- Definition, scope and use of epidemiology
- Epidemiology and public health
- Achievement in epidemiology
- Measuring health and disease
- Measuring disease frequency
- Death rates
- Observation epidemiology
- Experimental epidemiology
- Potential errors in epidemiological studies
- Causation in epidemiology
- Communicable diseases
- Clinical epidemiology
**MPH12: Bio statistics**

- Principle of biostatistics
- Properties of measurement
- Measuring reliability and validity
- Sampling
- Source of date
- Population
- Strategies for understanding the measure of data
- Descriptive statistics measure of central tendency
- The coefficient of variation (C,V)
- Conditional probability
- Marginal probability
- Using sample date to make estimates about population

**MPH13: Social and Behavioral Aspects of Public Health**

- Difference between sex and gender.
Mechanisms that relate gender to wellness and illness.

health in a cultural perspective

Race and Ethnicity

Poverty

Social Support, and Social Capital

Role of Families

Rational Decision Making

Spirituality

Change Within Systems

**MPH14: Ethics in Public Health.**

Tradition and profession and values in public health

Research ethics in public health

Special ethics concerns

Public health research and practice in international settings

Community base practice

Ethics and infections disease control

Public health genetics

Public health and health system reform
**MPH15: International Nutrition**

- Presents major nutritional problems that influence the health, survival, 
- Developmental capacity of populations in developing societies. 
- World declaration on the survival, protection and development of children. 
- Millennium development Goals (MDGs) 
- Under nutrition 
- Community, national, and international levels to improve nutritional status. 
- Full economic development through targeted public and private sector interventions that address the causes of malnutrition. 
- Breast and complementary feeding 
- Community based Nutrition interventions 
- Nutrition and HIV infection 
- The Nutrition Transition

**MPH21: Environmental Health and sustainable development**

- Human impact on the environment
- Environment-human interaction
- Environmental impact on humans
- Exposure, dose, response
- Environmental toxicology
- Environmental carcinogenesis
- Risk assessment and management
- Indoor and outdoor air pollution
- Environmental health economics and policy
- Occupational health
- Food- and water-borne disease
- Municipal, industrial, and hazardous waste
- Environmental justice and policy
- Risk communication

**MPH22: Research Methodology**

- Definition of Research
- Motivation in Research
- Types of Research
Significance of Research
Research and scientific method
Research process
Criteria of a Good Research
Problems encountered by researchers in India

**MPH23: Health system & polices in public Health**
- Policy making process, with historical, Ethical, legal.
- Basic model and function of health service
- International health
- Persistent and wide spread issues in providing health service
- Standard framework for policy analysis

**MPH24: Health Economic and health care financing**
- Basic economics tools
- Microeconomics tools for health economic
- Statistical tools for health Economics
Supply and demand

Production of health

Demand for health capital

Demand and supply of health insurance

The organization of health insurance market

Key players in the health care sector

Hospital and long-term care

Government intervention in health care

Government regulation principle regulatory mechanism

Social insurance

Health system reform

Epidemiology and economics

**MPH25: Health program management**

- principles in practice of health management
- Health development
- Health care as system
- Public health service
- Quality of health care management
- Management cycle from planning to evaluation
- Health needs concepts
- Health organization and strategies intent
- Health policy analysis tools for planning and evaluation of public health intervention.