

List of Ph.D. Course work subjects that can be offered under
Community Medicine Group from 2026

Community Medicine							
Group I		Group II		Group III		Group IV	
Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject
PHCM101	Community Medicine	PHCM201	Geriatrics	PHCM301	Epidemiology	PHCM401	Diabetes

PHCM101: COMMUNITY MEDICINE

Evolution of Public Health, Community Medicine, Preventive approach & Health promotion, disease control & promotion.

Health promotion disease control & prevention. Explain concept of Primordial, Primary, Secondary and Tertiary prevention with examples. Evolutionary History and mile-stones in Public Health – National and International levels.

Communicable and Non-Communicable diseases, emerging and re-emerging diseases

Understand and explain Epidemiology of Communicable/Non-communicable diseases- related national Health Programmes. Explain application of Disease surveillance system in control of Communicable/Non- communicable diseases. Explain & undertake steps to investigate & control outbreaks, epidemics and take measures to prevent the same.

Applied Epidemiology, Health research, Bio-statistics

Application of Epidemiology of Disease and Health giving suitable examples. Explain Epidemiological approach, types of Epidemiological studies, Hybrid Studies. Epidemiological Research methodology, Data Analysis and interpretation.

Nutrition

Importance of nutrition in health and disease. Dietary/nutritional concerns of vulnerable groups – young children, adolescents, ANC/PNC/Lactating mothers/senior citizens/individuals. Nutritional surveillance, education and rehabilitation, National programmes in nutrition

Environmental health

Environment -air, water, noise, radiation, temperature, ventilation, solid waste disposal, insects and vectors, and its impact on ecology and human health. Explain global warming and its health impact

Primary Health Care System, RCH, Demography & Family Welfare

Primary Health Care System in India, National health programmes on RCH, Demography & Family Welfare

Health Care Administration, Health Management and Public Health Leadership

Administration and Management in health care. Leadership styles, management techniques, planning process, monitoring & evaluation skills.

Health Policy, Medical Education, Integrating Alternative system of Medicine

Explain the role of health policy in promotion of Primary Health care. National Health Mission, National Health Programs, Medical Education and AYUSH

Social and behavioral sciences

Understand influence of social and behavioral practices on health. Importance of behavior change communication (BCC). Socio-cultural factors influencing behavior change.

Public Health Legislations

Explain public health legislations and need for the same. Enforcement of various public health laws.

International Health

Enlist and understand functioning of various UN agencies (including WHO) playing key role in international health. Provide advice to international travelers and vaccination requirements,

Occupational Health

Preventive and control measures against various occupational hazards – global, national and local level measures. Occupational safety measures. Social security and welfare provisions for workers – ESIS, Factory's Act

The recent advances in Public Health & miscellaneous issues

Events at local, district, national & global levels affecting health of the population. Utilization of modern technology, software, IT application in health promotion & disease prevention.

Health Economics

Describe the scope of health economics. Enumerate the various health committees established and their major recommendations since 1947-48 to till date.

PHCM201: GERIATRICS

Basic Geriatrics

Epidemiological and Demographical aspects of aging, Different Perspectives of process of aging, Preventive Geriatrics, National and International programmes for Elderly, Rehabilitation Geriatrics, Ethical and legal issues in geriatrics

Clinical Geriatrics I

Different Face of Clinical Geriatrics

Comprehensive geriatric assessment, Infections, Anaemia and Hematological disorders, Geriatric Syndrome

Gastrointestinal and Respiratory Disorders

Disorders of Gastrointestinal Tract, Disorders of Liver, Biliary System and Pancreas, Infections of Respiratory System, Non-infective Disorders of the Respiratory System

Cardiovascular Disorders

Congestive Cardiac Failure, Hypertension, Ischemic Heart Disease, Valvular Heart Diseases and Infective Endocarditis

CNS and Neuro-Psychiatric Disorders

Cerebro Vascular Diseases and Accidents, Seizure disorders, Psychogeriatric Disorders, Cognitive Impairment and Dementia, Neuro-degenerative Disorders including Parkinson, Infections of Central Nervous system, Delirium and coma

Clinical Geriatrics II

Genitourinary and Endocrinological Disorders

Fluid and Electrolyte Imbalance and metabolic disorders, Nephrology and Urological Disorders, Gynaecological Problems and Menopause, Diabetes Mellitus, Thyroid Obesity, and Sexuality

Musculoskeletal and Special Senses

Osteoporosis, Disease of the Joints, Fractures and Musculotendinous Disorders, Visual Impairment, Ear, Nose and Throat Disorders, Diseases of the Oral Cavity, Management of common skin problem in elderly, Medical Rehabilitation

Malignancies, Care of Terminally Ill and Palliative Care

Basic Principles of Oncology, Common Malignancies in men and Women, Haematoncology, Palliative Care and pain management, Long term care

Common Surgical Conditions and Emergencies

Common Surgical Conditions, Perioperative care, Poisoning, Accidents, Other Common Emergencies

PHCM301: EPIDEMIOLOGY

THE EPIDEMIOLOGIC APPROACH TO DISEASE AND INTERVENTION:

- a) Introduction
- b) The Dynamics of Disease Transmission,
- c) The Occurrence of Disease: I. Disease Surveillance and Measures of Morbidity
- d) The Occurrence of Disease: II. Mortality and Other Measures of Disease Impact.
- e) Assessing the Validity and Reliability of Diagnostic and Screening Tests
- f) The Natural History of Disease: Ways of Expressing Prognosis.

USING EPIDEMIOLOGY TO IDENTIFY THE CAUSE OF DISEASE

- a) Observational Studies
- b) Cohort Studies
- c) Comparing Cohort and Case-Control Studies
- d) Assessing Preventive and Therapeutic Measures: Randomized Trials
- e) Randomized Trials: Some Further Issues
- f) Estimating Risk: Is There an Association

APPLYING EPIDEMIOLOGY TO EVALUATION AND POLICY

- a) Using Epidemiology to Evaluate Health Services
- b) Epidemiologic Approach to Evaluating Screening Programs
- c) Epidemiology and Public Policy
- d) Ethical and Professional Issues in Epidemiology.

PHCM401: DIABETES MELLITUS

Definition, Epidemiology, Classification, Diagnosis (ADA criteria), Screening, Pathophysiology

Glucose homeostasis

Insulin- Synthesis, Secretion, Action

Pathogenesis

Type I } genetic and
Type II } environmental factors
Obesity, Insulin resistance

Risk factors, Clinical Presentation, Laboratory Evaluation

Oral Glucose Tolerance Test

Hb A1c, C-peptide

Lipid Profile

Renal Profile Fortis

Evaluation for Complications- Nephropathy, Retinopathy, Neuropathy, Coronary Vascular Disease

Management

- I. Lifestyle Modification- Diet, Exercise, weight
- II. Self-monitoring of Blood glucose
- III. Drug therapy:
 1. Type I → Insulin therapy → Types, Newer Insulin
 2. Type II → Glucose lowering Drugs
 - a. Sulphonyl ureas - DPP IV inhibitors, Biguanides - SGLT₂ inhibitors,
Thiazolidinediones – GLP₁ agonists
- IV. Acute complications of Diabetes
 1. Hypoglycemia, Diabetic ketoacidosis, Hyperglycemic Hyperosmolar State (Nonketotic)