Syllabus of M.D. (Community Medicine) 
Curriculum of Postgraduate Trained In M.D. (Community Medicine) of South Gujarat University

Every year 4 medical students can be admitted to the course of MD (post graduation). The number of seat varies on the basis of the policy of MCI and Government of Gujarat. The total duration of the course is of 3 years. The whole duration is divided into 6 terms where each term is of 6 months duration. The post graduate teaching in the department is carried out with the following goals and general objectives-

1. Goals and General Objectives of the Post Graduate (MD) Education:

The goal of postgraduate medical education shall be to produce competent specialists of Community Medicine (PSM)

- Who shall recognise the health needs of the community, and carry out professional obligations ethically and in keeping with objectives of the national health policy;
- Who shall have mastered most of the competencies, pertaining to the specialty that are required to be practiced at the health care delivery system;
- Who shall be aware of the contemporary advances and developments in the discipline of community medicine
- Who shall have acquired a spirit of scientific enquiry and is oriented to the principles of research methodology and epidemiology and
- Who shall have acquired the basic skills in training of the medical and paramedical professionals?

General objectives of post-graduate training
At the end of postgraduate training in the Community Medicine (PSM) the student shall be able to:

- Recognize the importance of the community medicine in the context of the health needs of the community and national priorities in the health sector;
- Practice the community medicine specialty ethically and in step with the principles of health care;
- Demonstrate sufficient understanding of the basic sciences relevant to the community medicine
Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies.

Diagnose and manage majority of the health conditions in the community on the basis of clinical assessment, and appropriately conduct investigations.

Plan and advise measures for the prevention and rehabilitation of patients suffering from disease and disability.

Demonstrate skills in documentation of individual/community case details as well as morbidity and mortality data relevant to the assigned situation.

Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.

Play the assigned role in the implementation of national health programmes, effectively and responsibly.

Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.

Develop skills as a self-directed learner; recognize continuing educational needs; select and use appropriate learning resources.

Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyse relevant published research literature.

Develop skills in using educational methods and techniques as applicable to the teaching of medical/ nursing students, general physicians and paramedical health workers.

Function as an effective leader of a health team engaged in health care, research or training.

2. Eligibility for admission in MD Community Medicine / PSM:

Eligibility:

Every candidate for M.D. in Community Medicine / PSM must have taken the degree of MBBS of Veer Narmad South Gujarat University or equivalent qualification of any college recognised by M.C.I.

Candidates wishing to undertake the M.D. (Community Medicine / P.S.M.) course will have to fulfil the requirements of houseman ship as per recommendations of MCI.

Admission is given by College Council as per the prevailing rule of admission of the University.

Duration of course:

The admission to the M.D. courses in the academic year shall be as per the norms of the MCI and the University.

The course of study shall spread over a period of three academic years (six terms where each term shall be of 180 days), preparation of dissertation including the examination period.

The academic year will be according to the MCI and South Gujarat University.

Each student has to submit his/her dissertation 6 months before appearance to the university examination.

Admission:

The PG admission committee members of the Surat Municipal Institute of Medical Education and Research and the Government Medical College, Surat, will select the candidate purely on the basis of merit and the selected candidate should take up the course within stipulated days as per notice/ order of the college/ university from the date.
of interview and their selection, failing which, the admission to the course will be cancelled. There are 4 seats of residency per year. Selection of residents is as per the MCI and the University rules.

3. **Syllabus (Course Content Theory/Practical)**

- Introduction to P.S.M. department and the subject; areas of application of community medicine and its branches.
- Sociology (Medical; Social stratification; Sociology & health; Social psychology; Community behaviour and its determinants; Family & health; Cultural & behavioural factors in health/disease; Social classification of families and other issues of social sciences and health.
- Demography and population trends; Demography and population trends (Census); Population control - various strategies; National family welfare programs.
- Water sources, safe water, water pollution, water borne diseases, etc.; Hardness, storage, filtration/chlorination; Air; Ventilation; Noise, light, radiation; Housing standards and criteria; Housing and health; Refuse disposal
- Health determinants, dimensions, positive health, relative concept; Concept of well being, spectrum of health, determinants of health, ecology of health; Indicators of health; Health situation in India - developed versus developing countries; Concept of disease - causal and natural history of disease; Concept of control, iceberg phenomenon; Levels of prevention and determinants of health; Population medicine, disease classification.
- Field visits to Urban practice area for environmental and dynamics of urban life; demographic survey; health seeking behaviour; various social, cultural, economic and other determinants affecting health and disease etc.; various hospital visits; visits to Rural Health Training Centre and Primary health centres; visits to various public health organizations such as water works, sewage treatment plant; waste disposal systems; orphanage; old age homes; working women’s hostel; remand homes; deaf and dumb school; various divisions of the Surat Municipal Corporation
- Nutrition – introduction; Classification of food and nutrients; Proteins and carbohydrates; Fat and fat soluble vitamins; Vitamin B-complex; Vitamin-C, scurvy, calcium, phosphorus; Iron & iron deficiency anaemia; Iodine & iodine deficiency disorders; Assessment of nutritional status; Energy and PEM; Micronutrients; Basic and applied nutrition; Nutrition in health and disease; Nutritional disorders; National nutritional programs (ICDS, applied nutrition and mid day meal); Community based delivery of programs and sociology of malnutrition; evaluation of nutritional programmes; Nutritive value of food stuffs; Calculation of dietary intake; Milk hygiene; Food and meat hygiene; malnutrition; Nutritional photographs and visits.
- Introduction to statistics and vital statistics - subject, data – it’s types and sources; Data - presentation tabular/graphic; Measures of central tendencies; Mean, median, mode and measures of variability; Measure of variability; Sampling methods; Probability; Measures of qualitative data - rate/ratio/proportions – incidence/prevalence; Normal curve; Tests of significance – qualitative; Chi-square test; Tests of significance - quantitative, paired and unpaired t and Z; Correlation and concept of regression and multivariate analysis; Indicators of MCH fertility; Vital statistics (MCH/fertility), incidence and prevalence rates; Demography.
- General Epidemiology including immunity, screening and sterilization; Introduction; Descriptive epidemiology; Case control study; Cohort study; Experimental & RCT study; Association and causality; Uses of epidemiology; Dynamics of diseases transmission;
Disease prevention and control; Immunity; Immunizing agents; Screening of a disease; Validity of a screening test; Sterilization and disinfection.

- Environment and health including Demonstration of Horrock’s apparatus, chloroscope, OT test and chlorination; Water quality (biological) and its health implications, coliform test; Water quality (chemical) standards and its health implications; Meteorological equipments; Excreta disposal (rural); Excreta disposal (urban)

- Entomology along with the demonstration of models and also of breeding sites; Morphology, life cycle, differences of various mosquito species and their medical importance; Control, prevention and ITMN trials; House fly and sand fly; Ticks, mites and Cyclops; Louse, flea and rats; Insecticides and resistance.

- Maternal and child health concepts, programmes and evaluation; Maternal and child survival strategies, problems and strategies; Vaccines (UIP); Vaccines (Non UIP e.g. rabies, Hep. B, MMR, Typhoral, IPV); Cold chain/walk in cooler; Contraceptives.

- Genetics and health including exercises (pedigree charts); Genetic photographs.

- Investigation of an epidemic; Interpretation of graphs and diagrams; Interpretation of tables / epidemiological exercises; Occupational and protective devices; Medical Certification of Death; Birth and death registration.

- Respiratory infections including Small pox; Chickenpox; Measles; Rubella/mumps; Influenza; Diphtheria; Whooping cough; Meningitis; Tuberculosis; RNTCP; Acute respiratory infections

- Vector borne diseases including Malaria; Filariasis; Dengue; Yellow fever; KFD; Japanese encephalitis; Leptospirosis; Plague; Rickettesial infections

- Surface infections including Trachoma; Tetanus; Leprosy; Rabies; STDs, Yaws; AIDS; Counselling in patients of HIV and STDS.

- Gastro intestinal infections including Poliomyelitis; Polio eradication and IPPI; Viral Hepatitis; Cholera; Acute diarrhoea diseases and ORS; Typhoid and paratyphoid; Amoebiasis; Drancunculosis; Roundworm; Hookworm; Food Poisoning including Salmonellosis.

- Non-Communicable diseases including Hypertension; Coronary heart diseases; Stroke and rheumatic heart diseases; Diabetes; Obesity; Cancer; Blindness; Accidents.

- Public health administration including History of public health (Global); History of public health (India); National health policy and health planning in India (various committees); Health set up in India (central, state, district and urban areas); Health set up in India (PHC and sub centres); Health care system; Public sector; Private sector; Indigenous system; NGOs; PPP.

- Health planning and management.

- National health programs including School health services; Behavioural child health problems; Geriatrics and adolescent health; CSSM & RCH; All National programs such as those for Malaria, Leprosy, Tuberculosis, Family welfare, Post partum programme, etc.

- International health

- Mental health

- Occupational health including Occupational hazards; Occupational diseases including pneumoconiosis; Occupational diseases including lead poisoning and occupational cancers; Occupational hazards in agriculture workers, sickness absenteeism; Health protection of workers including legislative measures (ESI act, factories and other acts); Disaster management and preparedness; Bioterrorism.

- Genetics and Eugenics; Health education; Integrated care; Maternal and child health including Introduction, MCH problems; Ante, intra, post natal care; Infant and child care;
Growth and development, growth chart; Preschool child care including child health problems, under five clinics.

- Recent advances.
- BCC / IEC
- Research methodology including both theoretical foundations and practical based approach. Research Methodology covers finalization of methodology for dissertation work; recent advances; general epidemiology; epidemiology of different diseases of importance in community medicine.

- Family care surveys; Clinico-social care reviews; Rapid surveys; Departmental Projects; Seminar and Presentations; Under graduate teaching; Post graduate presentations and posting; Journal Club; Seminars, Conferences, Clinical and case presentations; Socio-pathological studies of families in the field; Problem based learning
- CMEs, etc.
- Participation in epidemic control.
- Dissertation work to cover data collection; recent advances; data analysis and report write-up.

4. Teaching & Learning Activities

**Topics mentioned in the above will be taught to the students by the following methods:**

- Lectures
- Demonstrations
- Seminars
- Journal club
- Practical
- Field visits
- Postings
- Case presentations
- Group discussions
- Participation in undergraduate teaching, in departmental research and National Programme.

5. Monitoring Learning Process

Internal Assessment of the PG students is carried out on time to time basis as per the MCI Requirements. Internal examination includes field study; multiple choice questions; spotting; epidemiological and statistical exercise

6. Log-Book