



TEERTHANKER MAHAVEER UNIVERSITY

(Established under Govt. of U. P. Act No. 30, 2008)

Delhi Road, Moradabad (U.P.)

Ph.D. PROGRAMME

SYLLABUS FOR DISCIPLINE-SPECIFIC COURSE

PUBLIC HEALTH DENTISTRY

Course Code: PDS240125	PUBLIC HEALTH DENTISTRY	L	T	P	C
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Objective:	<p>The following are the Objectives:</p> <ol style="list-style-type: none"> 1. Understanding Public Health Principles 2. Oral Health and Disease Prevention 3. Epidemiology of Oral Diseases 4. Community-Based Dental Programs 5. Policy and Advocacy 6. Research Methodologies in Public Health Dentistry 7. Interdisciplinary Collaboration 8. Global and Local Health Challenges 9. Ethical and Legal Issues in Public Health Dentistry 10. Sustainable Development Goals (SDGs) in Oral Health 				
Course Outcomes:					
CO 1:	<p>Comprehension of Public Health Principles Demonstrate a thorough understanding of the principles of public health and their application to oral health care.</p>				
CO 2:	<p>Application of Epidemiological Skills Use epidemiological methods to analyze the distribution and determinants of oral health conditions in populations.</p>				
CO 3:	<p>Designing Community Programs Plan and implement effective community-based dental health programs targeting prevention and health promotion.</p>				
CO 4:	<p>Research Competence Conduct research using appropriate methodologies to address public health issues related to dentistry.</p>				
CO 5:	<p>Ethical Practice Apply ethical principles in decision-making processes, particularly in the context of community health initiatives and resource allocation.</p>				
Course Content:					
Unit 1:	<p>Public Health: Definition, concepts, and philosophy of dental health History of public health in India and at international level Terminologies used in public health</p>				

	<p>Health: Definition, concepts, and philosophy of health Health indicators Health determinants Community and its characteristics and relation to health</p> <p>Disease: Definition, concepts Multifactorial causation, natural history, risk factors Disease control and eradication, evaluation and causation, infection of specific diseases Vaccines and immunization</p>
Unit 2:	<p>General Epidemiology: Definition and aims, general principles Multifactorial causation, natural history, risk factors Methods in epidemiology, descriptive, analytical, experimental, and classic epidemiology of specific diseases, uses of epidemiology Duties of epidemiologist General idea of method of investigating chronic diseases, mostly non-infectious nature, epidemic, endemic, and pandemic. Ethical conversation in any study requirement New knowledge regarding ethical subjects Screening of diseases and standard procedures used</p>
Unit 3:	<p>Environmental Health: Impact of important components of the environment on health Principles and methods of identification, evaluation, and control of such health hazards Pollution of air, water, soil, noise, food Water purification, international standards of water Domestic and industrial toxins, ionizing radiation Occupational hazards Waste disposal- various methods and sanitation</p> <p>Public Health Education: Definition, aims, and principles of health education Health education, methods, models, contents, planning health education programs</p>
Unit 4:	<p>Public Health Practice and Administration System in India.</p> <p>Ethics and Jurisprudence: Basic principles of law Contract laws- dentist-patient relationships & Legal forms of practice Dental Malpractice Person identification through dentistry Legal protection for practicing dentist Consumer protection act</p>

	<p>Nutrition in Public Health: Study of science of nutrition and its application to human problem Nutritional surveys and their evaluations Influence of nutrition and diet on general health and oral health, dental caries, periodontal disease and oral cancers Dietary constituents and carcinogenicity Guidelines for nutrition</p> <p>Behavioral Sciences: Definition and introduction Sociology: social class, social group, family types, communities and social relationships, culture, its effect on oral health. Psychology: definition, development of child psychology, anxiety, fear and phobia, intelligence, learning, motivation, personalities, fear, dentist-patient relationship, modeling and experience</p> <p>Hospital Administration: Departmental maintenance, organizational structures Types of practices Biomedical waste management</p> <p>Health Care Delivery System: International oral health care delivery systems – Review Central and state system in general and oral health care delivery system if any National and health policy National health programs Health Planning and Evaluation Primary health care – concepts, oral health in PHC and its implications National and international health organizations Dentists Act 1928, Dental council of India, Ethics, Indian Dental Association Role of W.H.O. and Voluntary organizations in Health Care for the Community Oral Biology and Genetics: A detailed study of cell structure Introduction to Genetics, Gene structure, DNA, RNA Genetic counseling, gene typing Genetic approaches in the study of oral disorders Genetic Engineering - Answer to current health problems</p> <p>Demography & Family Planning: Demographic trends, family planning methods, milestones in population control in India.</p> <p>Health Economics: Health benefit analysis and cost-effective analysis</p>
Unit 5:	<p>Dental Public Health: History Definition and concepts of dental public health Differences between clinical and community dentistry Critical review of current practice</p>

	Dental problems of specific population groups such as chronically ill, handicapped, and institutionalized group
Unit 6:	<p>Epidemiology of Oral Diseases and Conditions: Dental caries, gingival, periodontal disease malocclusion, dental Fluorosis, oral cancer, TMJ disorders and other oral health related problems.</p> <p>Oral Survey Procedures: Planning Implementation WHO basic oral health methods 1997 Indices for dental diseases and conditions Evaluation</p> <p>Delivery of Dental Care: Dental person power – dental auxiliaries Dentist – population ratios, Public dental care programs School dental health programs- Incremental and comprehensive care Private practice and group practice Oral health policy – National and international policy</p> <p>Payment for Dental Care: Prepayment Post-payment Reimbursement plans Voluntary agencies Health insurance</p>
Unit 7:	<p>Evaluation of Quality of Dental Care: Problems in public and private oral health care system program Evaluation of quality of services, governmental control</p> <p>Preventive Dentistry: Levels of prevention Preventive oral health programs screening, health education, and motivation Prevention of all dental diseases-dental caries, periodontal diseases, oral cancer, malocclusion, and Dentofacial anomalies Role of dentist in the prevention of oral diseases at individual and community levels.</p> <p>Fluoride: History Mechanism of action Metabolism Fluoride toxicity Fluorosis Systemic and topical preparations Advantages and disadvantages of each Update regarding Fluorosis Epidemiological studies Methods of fluoride supplements</p>

	<p>De fluoridation techniques Antifluoridation lobby</p> <p>Plaque control measures- Health Education Personal oral hygiene Tooth brushing technique Dentifrices, mouth rinses</p> <p>Pit and fissure sealant, ART, Preventive resin restoration Preventive oral health care for medically compromised individual Update on recent preventive modalities Caries vaccines Dietary counseling</p> <p>Practice Management: Definition Principles of management of dental practice and types Organization and administration of dental practice Ethical and legal issues in dental practice Current trends Infection control in dental practice</p> <p>Tobacco Counseling: Health Consequences Tobacco dependence Benefits of intervention Tobacco cessation Role of dentist.</p> <p>Health Manpower Planning</p>
Textbooks:	<ol style="list-style-type: none"> 1. "Textbook of Public Health Dentistry" by Soben Peter 2. "Oral Health Epidemiology: Principles and Practice" by Amit Chattopadhyay 3. "Dentistry, Dental Practice, and the Community" by Brian A. Burt and Steven A. Eklund 4. "Principles of Dental Public Health" by James Morse Dunning 5. "Essential Dental Public Health" by Blanaid Daly, Paul Batchelor, Elizabeth Treasure, and Richard Watt
Reference Books:	<ol style="list-style-type: none"> 1. "Introduction to Public Health" by Mary-Jane Schneider 2. "Unity Oral Health Practice for the Dental Hygienist" by Kathy Voigt Geurink 3. "Preventive and Community Dentistry" by Dr. Hiremath 4. "Public Health and Community Dentistry" by K. Park and B. K. Mahajan
Additional Electronic Reference Material:	<ol style="list-style-type: none"> 1. Wiley Online Library 2. PubMed 3. Cochrane Library 4. WHO Oral Health 5. NIDCR