



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A++' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai -410 209

Tel 022-27432471, 022-27432994, Fax 022 -27431094

E-mail: registrar@mgmuhs.com; Website : www.mgmuhs.com

CHOICE BASED CREDIT SYSTEM

(CBCS)

(with effect from 2025-26 Batches)

Curriculum for Master in Public Health

Amended as per AC-51/2025, Dated 29/04/2025

Amended History

1. Amended as per AC-51/2025, [Resolution No.3.1(Annexure-3.13)], [Resolution No.3.5, (Annexure-7)]; Dated 29/04/2025.

[a](#)

Resolution No. 3.1 of Academic Council (AC-51/2025):

Resolved to approve the CBCS syllabus, including Program Outcomes (POs), Course Outcomes (COs), and PO-CO Mapping for 15 two-year postgraduate programs under MGMSBS for Semesters I and II. These include: M.Sc. Medical Biotechnology, M.Sc. Medical Genetics, M.Sc. Clinical Embryology, M.Sc. Clinical Nutrition, M.Sc. Medical Dialysis Technology, M.Sc. Molecular Biology, M.Sc. Medical Radiology & Imaging Technology, M.Sc. Cardiac Care Technology, M.Sc. Operation Theatre and Anaesthesia Technology, M.Sc. Emergency and Trauma Care, M. Optometry, Master in Hospital Administration, **Master of Public Health**, M.Sc. Health Informatics & M.Sc. Clinical Research to be effective from batch admitted in Academic Year 2025-26 onwards [ANNEXURE-3.1 to 3.30].

**MGM SCHOOL OF BIOMEDICAL SCIENCES****(A constituent unit of MGM INSTITUTE OF HEALTH SCIENCES)****(Deemed University u/s 3 of UGC Act 1956)****Grade “A” Accredited by NAAC****Sector 1, Kamothe, Navi Mumbai-410209, Tel.No.022-2743763, 27437632, 27432890****Email. sbsnm@mgmuhs.com/Website: www.mgmsbsnm.edu.in****CHOICE BASED CREDIT SYSTEM (CBCS)****(Academic Year 2025 - 26)****Curriculum for****M.Sc. Allied Health Sciences****Masters of Public Health****Semester I & II**

DIRECTOR'S MESSAGE

Welcome Message from the Director

Dear Postgraduate Students,

Welcome to **MGM School of Biomedical Sciences (MGMSBS)**, **MGMIHS**, a premier institution dedicated to advancing allied and health sciences education. As you embark on this transformative academic journey, you are joining a community that fosters excellence in research, clinical expertise, and innovation.

MGMIHS, accredited with NAAC 'A++' Grade (CGPA 3.55, 2022) and recognized as a **Category I Institution by UGC**, offers an ecosystem that nurtures both academic and professional growth. With **NIRF (151-200 rank band) recognition, NABH-accredited hospitals, NABL-accredited diagnostic labs, and JCI accreditation for MGM New Bombay Hospital**, we uphold global benchmarks in education and healthcare.

At MGMSBS, our **15 postgraduate programs** are meticulously designed to align with the National Commission for Allied and Healthcare Professionals (NCAHP) standards, National Education Policy (NEP) 2020, and the National Credit Framework (NCrF). We have implemented the **Choice-Based Credit System (CBCS)** to provide academic flexibility while ensuring rigorous training in clinical and technical skills. Our state-of-the-art research laboratories, digital classrooms, and the Central Research Laboratory (CRL) foster an environment that encourages innovation and evidence-based learning.

Postgraduate education at MGMSBS goes beyond theoretical learning—our curriculum integrates **hands-on clinical training, interdisciplinary collaboration, and exposure to real-world healthcare challenges**. We emphasize **research-driven education**, encouraging students to actively participate in **scientific discoveries, publications, and international collaborations**.

Beyond academics, we believe in **holistic development**, with initiatives such as the **AARAMBH Science and Wellness Club**, which promotes **mental well-being, leadership, and professional networking**.

As you step into this **next phase of academic and professional growth**, we encourage you to explore new ideas, engage in impactful research, and contribute meaningfully to the **healthcare ecosystem**. We are confident that your journey at MGMSBS will shape you into **skilled, compassionate, and visionary professionals**, ready to lead in the ever-evolving healthcare landscape.

We look forward to witnessing your achievements and contributions!

Dr. Mansee Thakur

Director, MGM School of Biomedical Sciences
MGM Institute of Health Sciences, Navi Mumbai

HEAD OF DEPARTMENT'S MESSAGE

Dear Students,

Greetings!!!

On behalf of the MGM Family, I am delighted to welcome you to the Masters in Public Health Programme at MGM School of Biomedical Sciences (MGM SBS).

The Masters in Public Health course is designed to offer you an inspiring, engaging, and fulfilling learning experience. This program is intended to provide you with the skills and knowledge needed to address the critical public health challenges of today and the future. As a student at MGM SBS, you will be immersed in a culture of learning by doing. Our teaching pedagogy blends both theoretical knowledge and practical application, preparing you for real-world public health scenarios. Your active participation will be key in enriching this learning experience.

This program also places a strong emphasis on fieldwork, industry visits, and practical exposure, providing you with invaluable opportunities to understand public health in action. I am confident that your time at MGM SBS will be both academically and professionally enriching.

This Handbook has been designed to give you a comprehensive understanding of the academic structure and practical training of the course, ensuring that you are fully prepared to meet the needs of the program.

With Best Wishes,

Dr. B. S. Nagaonkar
Head of Department,
MGM SBS

ACADEMICS

MASTERS OF PUBLIC HEALTH

(CHOICE BASED CREDIT SYSTEM)

Duration of the Programme: The Course shall extend over a period of 2 years with four semesters. Each year consist of 2 semesters with examinations at the end of every semester.

Eligibility for admission: MBBS/BDS/Graduate in AYUSH/Graduate in Nursing/ Graduate in Physiotherapy/ Graduate in Allied Health sciences or paramedical sciences / Graduate with experience in Hospital industry / Graduate in life sciences/ Graduate in Veterinary science with minimum 50% marks in qualifying (graduation) examination will be eligible for admission

Scheme of Examinations: There shall be examination at the end of each semester, which will be consisting of theory, practical, dissertation and Internal Assessments.

Clinical Posting: There will be mandatory clinical posting at Urban Health Training Centre, Rural Health Training Centre and in the Department of Community Medicine in each semester.

Requirement to Appear for the Examination: A candidate shall be permitted to appear for the university examination of any semester, if he/ she secure not less than 75% of attendance in the number of instructional days and not less than 35% Marks in Internal Assessment, failing which he/ she should redo that course of study. The criterion for appearing in last semester examination is to qualify all subjects of I, II and III semesters.

Medium of Instruction and Examination: The medium of instruction throughout the course and the examinations shall be English only.

Passing: A Candidate shall be declared to have passed the examination in a subject if he/she secured not less than 50% in aggregate internal and external examinations.

Conferment of Degree: A candidate, who has passed all the examinations as prescribed, shall be eligible to receive the degree of –“Masters in Public Health” from the MGM Institute of Health Sciences.

For any query visit the website: www.mgmsbsnm.edu.in

PROGRAMME OUTCOME

Program Code	Program Objective
PO 1	Public Health Knowledge and Technology: Apply advanced knowledge of public health systems, epidemiology, health policies, and technologies to improve population health outcomes and streamline public health interventions.
PO 2	Critical Thinking and Problem-Solving: Use analytical skills and professional judgment to assess public health issues, make data-driven decisions, and develop effective solutions to improve community health and address public health challenges.
PO 3	Healthcare Research Skills: Conduct and analyze public health research to inform evidence-based practices, contribute to innovations in public health policy and management, and improve public health decision-making.
PO 4	Professional Ethics and Public Health Practice: Adhere to ethical guidelines in public health practice, ensuring that social justice, equity, and ethical principles guide the design and implementation of health policies and programs.
PO 5	Communication Skills: Communicate effectively with diverse populations, healthcare providers, and policymakers to ensure clear information exchange, promote health education, and foster collaboration across public health initiatives.
PO 6	Teamwork and Collaboration: Collaborate effectively with interdisciplinary teams to address public health issues, promote community engagement, and implement public health programs, fostering a cooperative work environment.
PO 7	Holistic Development and Leadership: Develop intellectual, emotional, and leadership skills to navigate public health challenges, manage health organizations, and advocate for sustainable and equitable health solutions.
PO 8	Lifelong Learning: Cultivate a commitment to continuous learning, staying informed about emerging public health trends, research, and innovations to support ongoing professional development and improve public health practices.

PROGRAMME SPECIFIC OUTCOME

Program Code	Program Objective
PO 1	Provide in-depth public health knowledge for practical application in various health settings.
PO 2	Develop critical thinking to analyze and solve public health issues.
PO 3	Equip students to make informed, evidence-based decisions.
PO 4	Foster research skills for impactful public health studies and interventions.
PO 5	Prepare students for leadership and teamwork in multidisciplinary public health sectors.
PO 6	Strengthen communication skills for effective public health advocacy.
PO 7	Instill ethical principles for responsible public health practice.

PO 8	Encourage lifelong learning for continuous professional development.
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SEMESTER I

MPH 101 T	Introduction to Human Biology, Public Health, Healthcare System in India & Hospital Industry	Mapped POs	Teaching Learning Methodologies	Assessment Tools
CO1	To understand human biology and the functions of various body systems.	PO1, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To grasp knowledge about key public health issues and environmental health impacts.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To gain insights into healthcare systems and policies in India and globally.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	To understand the hospital industry's regulations, challenges, and opportunities.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

MPH 102 T	Introduction to Epidemiology and Demography	Mapped POs	Teaching Learning Methodologies	Assessment Tools
CO1	To apply epidemiological methods, including study designs and screening tests, to understand and analyse public health issues.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To understand and interpret epidemiological measures and study designs like cohort, case-control, and randomized control trials.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To analyse demographic data and trends, including fertility, mortality, and migration, and use this information in public health planning and policy development.	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

MPH 103 T	Introduction To Concepts & Principles of Management and Business Communication	Mapped POs	Teaching Learning Methodologies	Assessment Tools
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CO1	To gain a solid understanding of management principles, which will help students manage and improve performance in various industries.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To acquire practical skills in applying management functions (planning, organizing, staffing, directing, and controlling) to improve organizational efficiency.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To apply key management theories to real-world business challenges and decision-making processes.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	To demonstrate proficiency in business communication, including drafting professional business correspondence and delivering effective presentations.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

CC 001 T & CC 001 P	Research Methodology & Biostatistics (Core Course)	Mapped POs	Teaching Learning Methodologies	Assessment Tools
CO1	Student will be able to understand develop statistical models, research designs with the understating of background theory of various commonly used statistical techniques as well as analysis, interpretation & reporting of results and use of statistical software.	PO3 & PO8	Lecture, Practical, Journals	University Exam (Theory & Practical), Journal

MPH 104 CP	Practice of Public Health (Basic)	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To acquire practical experience in implementing public health programs, improving their skills in health assessments and intervention design.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Field Postings, Camps, Family adaptation Program, presentations	University Exam (Project Presentation), Log book, Project book
CO2	To develop a deeper understanding of community health needs and gain proficiency in creating effective public health strategies.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Field Postings, Camps, Family adaptation Program, presentations	University Exam (Project Presentation), Log book, Project book

SEMESTER II

MPH 105 T	Reproductive, Maternal, Child, Adolescent & Geriatric Health	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To gain a comprehensive understanding of reproductive, maternal, and child health services and their effectiveness in India.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To develop the ability to analyse and address key adolescent health issues, such as teenage pregnancy, mental health, and anaemia.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To demonstrate proficiency in applying gender-sensitive approaches and promoting social inclusion in public health initiatives.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	To be able to design and evaluate public health interventions that target health disparities among vulnerable groups.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

MPH 106 T	Epidemiology of Communicable And Non- Communicable Diseases	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To gain a solid understanding of the epidemiology of communicable and non-communicable diseases and their key determinants.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	Learn to analyze disease transmission dynamics and apply control measures effectively in real-world settings.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To develop practical skills in surveillance, outbreak investigation, and evaluating immunization programs and adverse events.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	To be able to design and implement strategies to prevent NCDs, recognizing their economic impact and links to communicable disease prevention.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

MPH 107 T	Health Planning, Health Management, Health Communication And Health Care	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To gain a thorough understanding of health policy frameworks and the roles of stakeholders in policy-making.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To develop practical skills in designing, implementing, and evaluating public health programs for disease prevention.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To apply strategic management tools to enhance public health policy and decision-making processes.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	Assess and integrate innovations in public health, including the use of health technologies and public-private partnerships.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO5	To be able to critically evaluate the effectiveness of health programs and policies in improving health outcomes across sectors.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Quiz, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment

MPH 108 T	Health Economics	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To understand basic health economics concepts and their application in healthcare.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO2	To apply economic principles to analyze demand, supply, and costs in healthcare systems.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO3	To use economic evaluation tools like CBA and CEA to assess healthcare interventions.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	Internal Exam, University Exam (Theory Exam), Seminar, Assignment
CO4	To grasp the significance of healthcare financing, reforms, and universal health coverage in	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	Internal Exam, University Exam (Theory Exam),

	improving systems.			Seminar, Assignment
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MPH 109 CP	Practice of Public Health (Advance)	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	To acquire practical experience in implementing public health programs, improving their skills in health assessments and intervention design.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Field Postings, Camps, Family adaptation Program, presentations	University Exam (Project Presentation), Log book, Project book
CO2	To develop a deeper understanding of community health needs and gain proficiency in creating effective public health strategies.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Field Postings, Camps, Family adaptation Program, presentations	University Exam

SEC 001 T	Innovation and Entrepreneurship	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	Students will grasp the concepts of innovation, its ecosystem, and the role of various stakeholders such as government policies, startups, and innovation hubs.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	University Exam
CO2	Cultivating an entrepreneurial mindset and leadership qualities necessary for driving innovation and leading ventures.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	University Exam
CO3	Understanding the intersection of technology and innovation and leveraging emerging technologies for entrepreneurial ventures.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	Lecture, Group Discussion, Assignment, Seminar	University Exam

SEC 002 T	One Health (NPTEL)	Mapping POs	Teaching Learning Methodologies	Assessment Tools
CO1	A comprehensive understanding of One Health's role in global health challenges, emphasizing interconnectedness among human, animal, and environmental health.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	E- Learning, Modules, Handouts	Online NPTEL MCQ test
CO2	Topics include research ethics, disease surveillance, and successes in controlling emerging infectious diseases.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	E- Learning, Modules, Handouts	Online NPTEL MCQ test
CO3	Students explore disease emergence, transmission, antimicrobial resistance, and food safety, gaining insights into effective public health strategies.	PO1,PO2,PO3, PO4,PO5, PO6,PO7, PO8	E- Learning, Modules, Handouts	Online NPTEL MCQ test

OUTLINE OF COURSE CURRICULUM														
Masters of Public Health (MPH)														
Semester I														
Code No.	Core Course	Credits/Week					Hrs/Semester					Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	Total
Discipline Specific Core Theory														
MPH 101 T	Introduction to Human Biology, Public Health, Health Care System in India & Hospital Industry	3	1	-	-	4	45	15	-	-	60	20	80	100
MPH 102 T	Introduction to Epidemiology & Demography	3	1	-	-	4	45	15	-	-	60	20	80	100
MPH 103 T	Introduction to Concepts & Principles of Management and Business Communication	3	1	-	-	4	45	15	-	-	60	20	80	100
CC 001 T	Research Methodology & Biostatistics (Core Course)	3	-	-	-	3	45	-	-	-	45	-	50	50
Discipline Specific Core Practical														
MPH 104 CP	Practice of Public Health (Basic)	-	-	-	15	5	-	-	-	225	225	-	50	50
CC 001 P	Research Methodology & Biostatistics (Core Course)	-	-	4	-	2	-	-	60	-	60	-	50	50
Total		12	3	4	15	22	180	45	60	225	510	60	390	450

OUTLINE OF COURSE CURRICULUM														
Masters of Public Health (MPH)														
Semester II														
Code No.	Core Course	Credits/Week					Hrs/Semester					Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	Total
Discipline Specific Core Theory														
MPH 105 T	Reproductive, Maternal, Child, Adolescent & Geriatric Health	3	1	-	-	4	45	15	-	-	60	20	80	100
MPH 106 T	Epidemiology of Communicable & Non-Communicable Diseases	3	-	-	-	3	45	-	-	-	45	20	80	100
MPH 107 T	Health Planning, Health Management, Health Communication & Health Care	3	1	-	-	4	45	15	-	-	60	20	80	100
MPH 108 T	Health Economics	2	-	-	-	2	30	-	-	-	30	10	40	50
Discipline Specific Core Practical														
MPH 109 CP	Practice of Public Health (Advance)	-	-	-	18	6	-	-	-	270	270	-	50	50
Skill Enhancement Course														
SEC 001 T	Innovation and Enterprenuarship	3	-	-	-	3	45	-	-	-	45	-	100	100
SEC 002 T	One Health (NPTEL)													
Total		14	2	0	18	22	210	30	0	270	510	70	430	500

FIRST YEAR
MASTERS OF PUBLIC HEALTH
SEMESTER-I

Code No.	Core Subjects
Discipline Specific Core Theory	
MPH 101 T	Introduction to Human Biology, Public Health, Health Care System in India & Hospital Industry
MPH 102 T	Introduction to Epidemiology & Demography
MPH 103 T	Introduction to Concepts & Principles of Management and Business Communication
CC 001 T	Research Methodology & Biostatistics (Core Course)
Discipline Specific Core Practical	
MPH 104 CP	Practice of Public Health - Basic
CC 001 P	Research Methodology & Biostatistics (Core Course)

Name the Programme	Masters of Public Health
Semester	Semester - I
Name of the Course	Introduction to Human Biology, Public Health, Health Care System in India & Hospital Industry
Course Code	MPH 101 T

Course Objective	<ul style="list-style-type: none"> • Introduce students to human biology, including cell structure, organ systems, and their physiological roles. • Provide an overview of public health, including its history, determinants, and the impact of environmental factors on health. • Explain global and Indian healthcare systems, policies, and delivery structures. • Explore the hospital industry, its regulations, challenges, and opportunities.
Course Outcomes	<ul style="list-style-type: none"> • To understand human biology and the functions of various body systems. • To grasp knowledge about key public health issues and environmental health impacts. • To gain insights into healthcare systems and policies in India and globally. • To understand the hospital industry's regulations, challenges, and opportunities.

Sr. No.	Topics	No. of Hrs.
1.	Introduction to human Biology: <ul style="list-style-type: none"> • Cell Structure and Function, Tissues, Organ Systems, and Homeostasis • Introduction to Anatomy & Physiology of Digestive System and Nutrition • Introduction to Anatomy & Physiology of Respiratory and Cardiovascular System • Introduction to Composition and Function of Blood • Introduction to Anatomy & Physiology of Urinary System and Excretion • Introduction to Anatomy & Physiology of Musculoskeletal System • Introduction to Anatomy & Physiology of Nervous System • Introduction to Anatomy & Physiology of Endocrine System • Introduction to Reproductive System 	15
2.	Introduction to Public Health: <ul style="list-style-type: none"> • History of Medicine • Changing Concepts of Health • Dimensions of Health • Determinants of Health • Environment & Health • Water – Sources, Pollution, Purification, Quality • Air – Composition, Pollution, Ventilation, • Light – Requirement, Measurement and Standards • Noise – Sources, Effects, Control • Radiation – Sources, Effects, Protection • Introduction to Meteorology 	20

	<ul style="list-style-type: none"> • Housing and Health • Segregation and Disposal of Bio- Medical Waste • Concept of Disease • Iceberg of Disease • Changing Concepts in Public Health • Concept of Control • Concept of Prevention • Levels of Prevention and Modes of Intervention • Hospitals & Community • Health Indicators • Public Health Approach • Public Health Problems in India • Limitations of Public Health 	
3.	Introduction to Health Care System: <ul style="list-style-type: none"> • Concept of Health Care • Levels of Health Care • Global overview of Health Care Systems • Health Care System in India • Health Care Delivery Infrastructure in India • Health Care Delivery Workforce in India • National Strategy for Health for All • National Health Policy • National Health Mission • Overview of National Health Programmes • Private Sector in Health Care 	15
4.	Hospital Industry: <ul style="list-style-type: none"> • Global Overview • Hospital Industry in India • Regulatory Councils, Accreditation and Laws related to hospital • Opportunities, Issues and Challenges in hospital industry 	10
Total		60 hrs

REFERENCE BOOKS:

1. Park K. Park's Textbook of Preventive and Social Medicine. 27th ed. Banarsidas Bhanot.
2. P.V. Sathe and P.P. Doke. Epidemiology and Management for Healthcare, 7th edition.
3. Ali ML, "Concise textbook of Preventive and Social Medicine an amazing approach"; 1st edition, published by Bhalani Publishing House.
4. Mahajan and Gupta, "Textbook of Preventive and Social Medicine"; 4th edition, published by JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD
5. Patton KT, "Mosby's, Handbook of Anatomy and Physiology"; published by ST LOUIS MOSBY 2000
6. Joshi DC; " Hospital Administration"; JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD
7. Sakharkar BM; " Principles of Hospital Administration and Planning"; JAYPEE BROTHERS MEDICAL PUBLISHERS PVT. LTD.

Name the Programme	Masters of Public Health
Semester	Semester - I
Name of the Course	Introduction To Epidemiology and Demography
Course Code	MPH 102 T

Course objective	<ul style="list-style-type: none"> • To introduce students to the key concepts and principles of epidemiology, including historical developments, study designs, and disease surveillance. • To provide students with an understanding of epidemiological measures, such as incidence, prevalence, and screening tests, and their application in health services. • To teach students about demographic processes, population trends, and key demographic indicators such as fertility, mortality, and migration, with a focus on global and Indian contexts.
Course outcomes	<ul style="list-style-type: none"> • To apply epidemiological methods, including study designs and screening tests, to understand and analyse public health issues. • To understand and interpret epidemiological measures and study designs like cohort, case-control, and randomized control trials. • To analyse demographic data and trends, including fertility, mortality, and migration, and use this information in public health planning and policy development..

Sr. No.	Topics	No. of Hrs.
1.	Introduction to Epidemiology: <ul style="list-style-type: none"> • Definition, Historical developments: John snows study and Doll and Hill study, epidemiological triad, Role of epidemiology in health services. • Measurements in Epidemiology • Incidence and Prevalence • Descriptive Epidemiology • Cross sectional study design • Analytical Epidemiology • Case control study design • Cohort study design • Experimental Epidemiology • Randomized control trials • Non-randomized control trial • Introduction to confounding and bias • Interpretation of association • Causation and association • Screening • Screening tests –Sensitivity & Specificity • Introduction to Infectious Disease Epidemiology • Disease surveillance • Outbreak investigation 	30

2.	Introduction to Demography: <ul style="list-style-type: none"> • Demographic Processes • Demographic Cycle • World Population Trends • Demographic Trends in India • Census • Demographic Indicators • Age Pyramid • Sex ratio • Population Density • Migration • Urbanization • Literacy & Education • Life Expectancy • Fertility and factors associated • Fertility Indicators • Measures of Mortality • Growth rate • Vital Statistics • Concept of Life Table 	30
Total		60 hrs

REFERENCE BOOKS:

1. Park K. Park's Textbook of Preventive and Social Medicine. 27th ed. Published by Banarsidas Bhanot.
2. P.V. Sathe and P.P. Doke. Epidemiology and Management for Healthcare, 7th edition.
3. Ali ML, "Concise textbook of Preventive and Social Medicine an amazing approach"; 1st edition, published by Bhalani Publishing House.
4. Mahajan and Gupta, "Textbook of Preventive and Social Medicine"; 4th edition, published by JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD

Name the Programme	Masters of Public Health
Semester	Semester - I
Name of the Course	Introduction to Concepts & Principles of Management and Business Communication
Course Code	MPH 103 T

Course Objective	<ul style="list-style-type: none"> • The objective of this course is to introduce students to the fundamental concepts of management, its nature, and its importance in organizational settings. • The students will understand the core management functions: planning, organizing, staffing, directing, and controlling, and how to apply them effectively in business operations. • The purpose of this course is to familiarize students with key management theories, such as Taylor's scientific management and Fayol's principles, and how to implement them in modern organizations. • The course aims to equip students with essential communication skills for business, including writing professional emails, letters, reports, and delivering impactful presentations.
Course Outcomes	<ul style="list-style-type: none"> • To gain a solid understanding of management principles, which will help students manage and improve performance in various industries. • To acquire practical skills in applying management functions (planning, organizing, staffing, directing, and controlling) to improve organizational efficiency. • To apply key management theories to real-world business challenges and decision-making processes. • To demonstrate proficiency in business communication, including drafting professional business correspondence and delivering effective presentations.

Sr. No.	Topics	No. of Hrs.
PRINCIPLES OF MANAGEMENT		
1.	Introduction to Management: Concept, nature and importance; Management Vs. administration; Management skills; Levels of management; Evolution of management; Early contributors, Taylor's scientific management theory; Fayol's principles of management, Modern healthcare management.	5
2.	Management functions: Introduction to functions of management; Planning: nature, scope and its significance; Types of plans, planning process, barriers to effective planning and decision making. Process organizing: Concept, forms of organizational structure, departmentalization, span of control, delegation of authority, authority and responsibility, organizational design.	10
3.	Staffing and directing: Concept, system approach, manpower planning, job design, recruitment and selection, training and development, performance appraisal. Directing: Concept, direction and supervision; Motivation: Concept, motivation and performance, theories of motivation, approaches for improving motivation, pay and job performance, quality of work life, morale building.	5
4.	Leadership: Concept, functions, styles and theories. Communication: Process,	5

	importance, channels, barriers to communication, communication and management, role of communication in managerial effectiveness.	
5.	Controlling: Meaning, steps in a control process, need for control, types of control methods, essentials of effective control systems, problems in central process, control techniques.	5
BUSINESS COMMUNICATION		
1.	Introduction to Communication, Types of Communication and Barriers to communication	2
2.	Principles of Effective Writing: Twelve Principles of Business Writing, Frequently Made Mistakes in Business Writing, Types of Business Messages (Good messages- Bad messages)	2
3.	Letter Writing: Conventions of Letter Writing, Types of Letters, Approaches to Letter Writing- Routine, Unpleasant, Pleasant and Persuasive, Letter Writing Formats Opening Closing Salutation, etc.)	2
4.	Claims and Responses: Approaches to Writing Claims and Responses (Claim Acceptance, Claim Refusal, Claim Settlement)	2
5.	Memoranda: Purpose, Format of a Memo, Types of Memoranda	2
6.	E-Mail Etiquette: Includes all the points covered in Letter Writing, Do's and Don'ts of Writing Emails (Exercises, Examples and critiquing)	2
7.	Agenda and Minutes of Meeting: Learning how to prepare an agenda for a meeting and take minutes	2
8.	Report Writing: Short Reports –Process, Structure and Layout, SIP Reports –Process, Structure and Layout.	2
9.	Business Proposals: Proposal formats, Solicited and Unsolicited Proposals	2
10.	CVs and Applications: Cover letter, CV format, Creating a LinkedIn and Facebook Profile	2
11.	Presentation Skills: Preparing for Presentations, Audience Analysis, Delivery, Creating Audio- Visual Aids, Nonverbal Communication and Body Language, Grooming and Attire Rules for Presentation, Team Presentation Etiquette	2
12.	Introduction to managerial communication, understanding the component of communication, small group and team communication, business and professional communication.	2
13.	Written Analysis and communication, Spoken Business communication	2
14.	Cultural Identity and intercultural communication, difficult communication	2
15.	Intercultural communication competence, Organizational communication	2
Total		60 hrs

REFERENCE BOOKS:

1. Tripathi PC; “Principles of Management”; 4th edition; published by TATA MCGRAW HILL EDUCATION PVT LTD
2. Govindarajan N, “Principles of Management”; 8th edition published by PHI LEARNING PRIVATE LIMITED
3. Lesikar RV, “Business Communication: Making connections in a Digital world”; 11th edition published by TATA MCGRAW HILL EDUCATION PRIVATE LIMITED
4. Bhushan U; “Introduction to Business communication”; 1st edition published by JAICO PUBLISHING HOUSE

Name the Programme	Masters of Public Health
Semester	Semester - I
Name of the Course	Research Methodology & Biostatistics (Core Course)
Course Code	CC 001 T

Teaching Objective	<ul style="list-style-type: none"> The course is intended to give an overview of research and statistical models commonly used in medical and bio-medical sciences. The goal is to impart an intuitive, understanding and working knowledge of research designs and statistical analysis. The strategy would be to simplify, analyse the treatment of statistical inference and to focus primarily on how to specify and interpret the outcome of research.
Learning Outcomes	<ul style="list-style-type: none"> Student will be able to understand develop statistical models, research designs with the understating of background theory of various commonly used statistical techniques as well as analysis, interpretation & reporting of results and use of statistical software.

Sr. No	Topic	No. of Hrs.
A	Research Methodology:	23
1	Scientific Methods of Research: Definition of Research, Assumptions, Operations and Aims of Scientific Research. Research Process, Significance and Criteria of Good Research, Research Methods versus Methodology	4
2	Research Designs: Observational Studies: Descriptive, explanatory, and exploratory, Experimental Studies: Pre-test design, post-test design, Follow-up or longitudinal design, Cohort Studies, Case – Control Studies, Cross-sectional studies, Intervention studies.	5
3	Sampling Designs: Census and Sample Survey, Need and importance for Sampling, Implications of a Sample Design, Different Types of Sample Designs (Probability sampling and non-probability sampling), Systematic sampling, Stratified sampling, Cluster sampling, Multi-stage sampling, Sampling with probability proportional to size, Sequential sampling.	5
4	Measurement in research: Measurement Scales, Sources of Error in Measurement,	3
5	Methods of Data Collection: Types of data, Collection of Primary Data, Observation Method, Interview Method	4
6	Research Ethics and plagiarism	2
B	Biostatistics	22
7	Data Presentation: Types of numerical data: Nominal, Ordinal, Ranked, Discrete and continuous. Tables: Frequency distributions, Relative frequency, Graph: Bar charts, Histograms, Frequency polygons, scatter plots, line graphs	3
8	Measures of Central Tendency and Dispersion: Mean, Median, Mode, Range, Inter quartile range, variance and Standard Deviation, Coefficient of variation, grouped mean and grouped standard deviation (including merits and demerits).	3
9	Testing of Hypotheses: Definition, Basic Concepts, Procedure for Hypothesis Testing, power of test, Normal distribution, Parametric Tests including Z-test, t-test, and ANOVA	4

10	Chi-square Test: Chi-square as a Non-parametric Test, Applications.	2
11	Measures of Relationship: Correlation and Simple Regression Analysis	3
12	Non-parametric test: Sign test, Wilcoxon signed-Rank Test, Wilcoxon Rank Sum Test: Mann-Whitney U test, Kruskal Walli's test, Friedman's test, and Spearman Rank correlation test.	3
13	Vital Health Statistics: rate, crude rate, age specific rate, Measurement of fertility, Rate, Measures of mortality.	4
Total		45 hrs

CC 001 P–Research Methodology & Biostatistics

Sr. No.	Topics	No. of Hrs.
A	Research Methodology	
1	Research Article Presentation (Seminar)	5
B	Biostatistics	
2	Data Presentation	4
3	Measures of Central Tendency and Dispersion	6
4	Testing of Hypotheses	16
5	Chi-square Test	4
6	Measures of Relationship	6
7	Analysis of Variance	5
8	Non parametric or Distribution-free Tests	8
9	Computer Application Using Statistical Software including SPSS	6
Total		60 hrs

Reference Books:

1. Daniel WW. Biostatistics: A foundation for analysis in the health sciences. 10th ed. Wiley; 2013.
2. Gupta SC, Kapoor VK. Fundamentals of mathematical statistics. Sultan Chand & Sons; 2020 Sep.
3. Kothari CR, Garg G. Research methodology: Methods and techniques. 2019.
4. Mahajan BK. Methods in biostatistics for medical students and research workers. 7th ed. Jaypee Brothers Medical Publishers; 2010.
5. Murthy MN. Sampling theory and methods. Statistical Publishing Society; 1967.
6. Singh YK. Fundamental of research methodology and statistics. New Age International; 2006.

Resolution No. 3.5 of Academic Council (AC-51/2025):

Resolved to approve the submitted list of recommended books for M.Sc. Clinical Nutrition and the course on **Biostatistics and Research Methodology** [ANNEXURE-7].

Annexure-7 of AC-51/2025

Biostatistics & Research Methodology Books List

Subject	Book Name	Author
Biostatistics & Research Methodology	Biostatistics: A Foundation for Analysis in the Health Sciences (10th ed.)	Daniel WW.
	Biostatistical Analysis (5th ed.)	Zar JH.
	Research Methodology: Methods and Techniques	Kothari CR, Garg G.
	Methods in Biostatistics for Medical Students and Research Workers (7th ed.)	Mahajan BK.
	Sampling Theory and Methods	Murthy MN.
	Fundamentals of Research Methodology and Statistics	Singh YK.
	Fundamentals of Biostatistics (8th ed.)	Rosner B.
	An Introduction to Medical Statistics (4th ed.)	Bland M.

Name the Programme	Masters of Public Health
Semester	Semester - I
Name of the Course	Practice of Public Health (Basic)
Course Code	MPH 104 CP

Course Objective	<ul style="list-style-type: none"> To provide students with exposure to various healthcare settings, enhancing their understanding of public health practice in real-world environments. To strengthen students' ability to apply public health theories and methodologies in addressing community health challenges.
Course Outcome	<ul style="list-style-type: none"> To acquire practical experience in implementing public health programs, improving their skills in health assessments and intervention design. To develop a deeper understanding of community health needs and gain proficiency in creating effective public health strategies.

Sr. No.	Clinical Posting	No. of Hrs.
1	<p>UNDER the Supervision of Community Medicine Faculty CLINICAL POSTING AT RURAL HEALTH CENTRE: Learning Objectives:</p> <ol style="list-style-type: none"> 1. Observing the staffing, Layout and working of RHTC/UHTC 2. Observing and coordinating for National Health Programs for e.g. national immunization program, National program for Non communicable diseases, National Tuberculosis Elimination program, National leprosy eradication program, National Family Welfare program 3. Conducting and Coordination for National Health Surveys 4. Performing and Coordinating for School health camps 5. Monitoring for NCD clinics and Under 5 Clinics 6. Monthly meeting community health workers for planning and creating awareness about preventive, Promotive and Curative health services in the community. 7. Creating awareness in the community through health education, street plays 8. Maintaining communication with relevant stakeholders. 9. Learning and acquiring skills as public health administrator. 10. Attending the various seminars based on public health topics organized by Medical Colleges at Mumbai on every Saturday. 11. Participation and Coordination for Family adoption program. 12. Field visits in the areas for public health importance. 	225
Total		225 hrs

FIRST YEAR
MASTERS OF PUBLIC HEALTH
SEMESTER-II

Code No.	Core Subjects
Discipline Specific Core Theory	
MPH 105 T	Reproductive, Maternal, Child, Adolescent & Geriatric Health
MPH 106 T	Epidemiology of Communicable & Non-Communicable Diseases
MPH 107 T	Health Planning, Health Management, Health Communication & Health Care
MPH 108 T	Health Economics
Discipline Specific Core Practical	
MPH 109 CP	Practice of Public Health (Advance)
Skill Enhancement Course	
SEC 001 T	Innovation and Entrepreneurship
SEC 002 T	One Health (NPTEL)

Name the Programme	Masters of Public Health
Semester	Semester - II
Name of the Course	Reproductive, Maternal, Child, Adolescent & Geriatric Health
Course Code	MPH 105 T

Course Objectives	<ul style="list-style-type: none"> To provide students with an understanding of reproductive, maternal, and child health programs in India, focusing on policies and service delivery. To enhance students' knowledge of adolescent health issues and the social determinants that impact health outcomes. To equip students with the ability to integrate gender equality and social inclusion in public health practices. To familiarize students with the health challenges faced by vulnerable populations, including women, children, and the elderly, and ways to address them.
Course Outcome	<ul style="list-style-type: none"> To gain a comprehensive understanding of reproductive, maternal, and child health services and their effectiveness in India. To develop the ability to analyse and address key adolescent health issues, such as teenage pregnancy, mental health, and anaemia. To demonstrate proficiency in applying gender-sensitive approaches and promoting social inclusion in public health initiatives. To be able to design and evaluate public health interventions that target health disparities among vulnerable groups.

Sr. No.	CONTENT	No. of Hrs.
1.	<ul style="list-style-type: none"> Fundamentals of reproductive biology Adolescent Sexual and Reproductive Health Reproductive Health Policy Family Welfare and Contraceptives Reproductive Health programs in India Introduction to maternal, new-born and child health programs and their behavioural basis Historical developments in MCH in India Introduction to the RMNCH+A services – historical context, evolution, coverage and innovations Various components of service delivery under RMNCH+A (including GoI programs) MCH Care service delivery Evolution of RCH services in the country – Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) Framework for evaluation of services Reproductive & Perinatal Epidemiology Prenatal and Infant Growth and Development Issues in the Reduction of Maternal and Neonatal Mortality 	60
2.	<ul style="list-style-type: none"> Preventing peri-natal and infant mortality 	

	<ul style="list-style-type: none"> • Infectious Disease and Child Survival • Nutrition and Growth in Maternal and Child Health • Legislations and programs in MCH • Overview of population health approaches for adolescents • Adolescent Health and Development • The Social Context of Adolescent Health and Development • Adolescent Health status in India • Adolescent Health Development - policy and systems • Health issues specific to adolescents: anemia, teenage pregnancy, menstrual hygiene, obesity, mental health promotion and illness prevention, substance use prevention, violence, media etc. • Define concepts - Gender, vulnerable populations, gender equality and equity and emerging issues • Explain the difference between sex and gender and how these variables, combined with other forms of social exclusion impacts on health • To increase understanding of the importance, benefits and urgency to identify and reduce barriers and address the needs of women and socially excluded groups, and promote their agency in the context of accessing health care and related information • To identify good practices in Gender and Social Inclusion (GSI) within India • Rights of the Child • National Policy for Children • School Health Services • Integrated Child Development Services (ICDS) • Health problems of Aged • Health status of Aged in India • Potential for disease prevention in elderly • Old Age Homes 	
Total		60 hrs

Reference Books:

1. Park K. Park's Textbook of Preventive and Social Medicine. 27th ed. Banarsidas Bhanot.
2. P.V. Sathe and P.P. Doke. Epidemiology and Management for Healthcare, 7th edition.
3. Ali ML, "Concise textbook of Preventive and Social Medicine an amazing approach"; 1st edition, published by Bhalani Publishing House.
4. Mahajan and Gupta, "Textbook of Preventive and Social Medicine"; 4th edition, published by JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD

Name the Programme	Masters of Public Health
Semester	Semester - II
Name of the Course	Epidemiology of Communicable and Non-Communicable Diseases
Course Code	MPH 106 T

Course Objectives	<ul style="list-style-type: none"> To provide an in-depth understanding of communicable and non-communicable disease epidemiology, including transmission dynamics and control strategies. To develop the ability to analyse factors leading to the emergence and persistence of infectious diseases and design appropriate interventions. To equip students with practical skills in disease surveillance, outbreak investigation, and applying epidemiological models for various diseases. To explore prevention strategies for NCDs, emphasizing risk factors, public health approaches, and policy influence, and understanding the interconnections with communicable diseases.
Course Outcomes	<ul style="list-style-type: none"> To gain a solid understanding of the epidemiology of communicable and non-communicable diseases and their key determinants. Learn to analyze disease transmission dynamics and apply control measures effectively in real-world settings. To develop practical skills in surveillance, outbreak investigation, and evaluating immunization programs and adverse events. To be able to design and implement strategies to prevent NCDs, recognizing their economic impact and links to communicable disease prevention.

Sr. No.	CONTENT	No. of Hrs.
	<ul style="list-style-type: none"> Communicable disease epidemiology Recognize the burden of communicable diseases (CD) affecting the population Examine factors contributing to the persistence of infectious diseases Understand reasons for emergence and re-emergence of infectious diseases Key concepts - Incubation periods, Epidemic patterns, Modes of transmission, Transmission dynamics. Measures of infectiousness Secondary attack rates Analyze the transmission dynamics of diseases and design appropriate control measures Apply basic infectious diseases epidemiological skills to address major emerging and re-emerging communicable diseases Surveillance: Case in point: Integrated Disease Surveillance Program (IDSP) Epidemiology of common communicable diseases like TB, Malaria, Leprosy, Polio, STIs, AIDS, Meningococcal meningitis, Hepatitis B, and Measles (mathematical models of infection dynamics, outbreak investigation and non-randomized control trialsurveillance, schedules, adverse reactions, contraindications, vaccine efficacy, impact assessment) Live outbreak investigation Adverse Event Following Immunization (AEFI) investigation 	45

<ul style="list-style-type: none"> • Non-communicable diseases (NCD) epidemiology: • Describe and understand the epidemiology of NCDs - Cardiovascular diseases, Hypertension, Diabetes mellitus, Cancers, Mental health, Stroke, Burns/trauma/accidents etc. • Comprehend the upstream and downstream determinants of NCDs • Understand the Individual approaches/or high-risk approaches and population based/ or public health approaches to prevent NCDs • Recognize the risk factor approach to prevent non-communicable diseases • Comprehend the Population based/public health approaches to prevention of common NCD risk factors (physical inactivity, tobacco and unhealthy diet) • Familiarize with the current projects on targeting the prevention of NCDs, including, innovations in prevention • How prevention of NCDs interlinks with Communicable diseases. How women and child health, health of the girl child links to prevention of NCDs • Recognize Economic burden of NCDs and benefits of prevention • Comprehend how sustainable development and prevention of NCDs go hand in hand • Comprehend the power of policy and role of environment in the prevention of NCDs • Population-based screening • Surveillance of cancers including cancer registry • Use of EpiInfo & GIS for Disease Surveillance • Covid 19 Pandemic Global & Local Scenario • Epidemiology of Corona Virus • Covid 19 Pandemic Control Measure • Covid 19 Vaccination 	
Total	45 hrs

REFERENCE BOOKS:

1. Park K. Park's Textbook of Preventive and Social Medicine. 27th ed. Banarsidas Bhanot.
2. P.V. Sathe and P.P. Doke. Epidemiology and Management for Healthcare, 7th edition.
3. Ali ML, "Concise textbook of Preventive and Social Medicine an amazing approach"; 1st edition, published by Bhalani Publishing House.
4. Mahajan and Gupta, "Textbook of Preventive and Social Medicine"; 4th edition, published by JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD

Name the Programme	Masters of Public Health
Semester	Semester - II
Name of the Course	Health Planning, Health Management, Health Communication and Health Care
Course Code	MPH 107 T

Course Objectives	<ul style="list-style-type: none"> • To understand health policy frameworks and explore their application in improving public health outcomes. • To analyse the roles of stakeholders in health policy-making and their influence on health systems. • To design, implement, and evaluate public health programs addressing communicable and non-communicable diseases. • To develop strategic management skills using tools like SWOT analysis and strategic planning for public health systems. • To integrate innovation and technology in public health systems, including health informatics, e-health, and m-health.
Course Outcomes	<ul style="list-style-type: none"> • To gain a thorough understanding of health policy frameworks and the roles of stakeholders in policy-making. • To develop practical skills in designing, implementing, and evaluating public health programs for disease prevention. • To apply strategic management tools to enhance public health policy and decision-making processes. • Assess and integrate innovations in public health, including the use of health technologies and public-private partnerships. • To be able to critically evaluate the effectiveness of health programs and policies in improving health outcomes across sectors.

Sr. No.	CONTENT	No. of Hrs.
	<ul style="list-style-type: none"> • Policy framework • Stake holders in policy making • Translating research in policy making • Effects of national and international affairs on health policy • Introduction to different national population, disease control, tobacco control, nutrition, maternal and child health policies • Short term versus long term policies • Design and evaluation of public health programs • Concepts underlying the design of health programs; • Concepts of Governance and Institutions • Critical appraisal of issues in health policy and financing • Theory explaining public health action, its evolution and application in health policy • Methods of assessing the health impact of different types of policy; national and global perspective • Assessing health impacts of different policies across sectors • Impact of health threats and interventions to counter health threats including 	60

	<p>crisis management</p> <ul style="list-style-type: none"> • Role of Non-governmental Organizations (NGOs) in health care • Inter-sectoral coordination in health including Public Private Partnership • Advocacy and planning in health care • Strategy: various definitions • Major concepts and frameworks in strategic management: SWOT, experience curve, portfolio theory, value chain • Strategic thinking and decision making • Strategic planning: Environmental, scenario, implementation and evaluation • Sustainability • Innovations in public health • Health informatics, e-Health • Telemedicine, m-Health • Business modelling: preparing your own business model • Operational Research and • Safety, Acceptability, Feasibility and Effectiveness (SAFE) in designing Public Health Interventions • Objectives, Targets & Goals • Planning Cycle • Management methods and techniques • Health Planning in India • Health Care System in India • Evaluation of Health Services • Concept, Elements and Principles of Primary Health Care • Indian Public Health Standards • Communication Process • Health Communication • Health Education 	
Total		60 hrs

Reference Books:

1. Park K. Park's Textbook of Preventive and Social Medicine. 27th ed. Banarsidas Bhanot.
2. P.V. Sathe and P.P. Doke. Epidemiology and Management for Healthcare, 7th edition.
3. Ali ML, "Concise textbook of Preventive and Social Medicine an amazing approach"; 1st edition, published by Bhalani Publishing House.
4. Mahajan and Gupta, "Textbook of Preventive and Social Medicine"; 4th edition, published by JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD

Name the Programme	Masters of Public Health
Semester	Semester - II
Name of the Course	Health Economics
Course Code	MPH 108 T

Course Objective:	<ul style="list-style-type: none"> • The objective of this course is to introduce students to key concepts in health economics, including micro and macroeconomics and their healthcare applications. • Students will learn about economic principles such as supply and demand, production functions, and cost determinants in healthcare. • The course aims to teach costing methods, efficiency, effectiveness, and economic evaluations like CBA and CEA. • Students will understand the role of healthcare financing, universal health coverage, and health sector reforms.
Course Outcomes	<ul style="list-style-type: none"> • To understand basic health economics concepts and their application in healthcare. • To apply economic principles to analyze demand, supply, and costs in healthcare systems. • To use economic evaluation tools like CBA and CEA to assess healthcare interventions. • To grasp the significance of healthcare financing, reforms, and universal health coverage in improving systems..

Sr. No.	Topics	No. of Hrs.
1.	<ul style="list-style-type: none"> • Basic concepts in health economics • Micro and Macro economics • Production Function • Determinants of demand, supply and costs of production • Supply & Demand for Health Care Personnel • Concepts of efficiency, effectiveness, equity, elasticity of demand • Concept of costing, marginal cost analysis, and opportunity cost • Short term and long-term cost • Budgeting • Measuring health outcomes • Principles and application of economic evaluation in health care • Cost Benefit Analysis (CBA) • Cost-Effective Analysis (CEA) • Lorenz's Curve • Genie's Coefficient • Universal health coverage and role of health care financing • Health sector reforms 	30
Total		30 hrs

Reference Books:

1. Dutta SB, “Health Economics for Hospital Management”; 1st edition; JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD 2014
2. Gupta GS, “Managerial Economics”; 2nd edition; Published by TATA MCGRAW HILL EDUCATION PVT LTD 2011
3. Dwivedi DN, “Managerial Economics”; 7th edition; published by VIKAS PUBLISHING HOUSE PVT LTD 2008
4. Anand NK, “Health Economics”; Second edition; published by AITBS PUBLISHERS, INDIA 2012
5. Mithani DM, “Managerial Economics”; published by HIMALAYA PUBLISHING HOUSE 2009

Name the Programme	Masters of Public Health
Semester	Semester - II
Name of the Course	Practice of Public Health (Advance)
Course Code	MPH 109 CP

Course Objective	<ul style="list-style-type: none"> To provide students with exposure to various healthcare settings, enhancing their understanding of public health practice in real-world environments. To strengthen students' ability to apply public health theories and methodologies in addressing community health challenges.
Course Outcome	<ul style="list-style-type: none"> To acquire practical experience in implementing public health programs, improving their skills in health assessments and intervention design. To develop a deeper understanding of community health needs and gain proficiency in creating effective public health strategies..

Sr. No.	Clinical Posting	No. of Hrs.
1	<p>UNDER the Supervision of Community Medicine Faculty CLINICAL POSTING AT URBAN HEALTH CENTRE: Learning Objectives:</p> <ol style="list-style-type: none"> 1. Observing the staffing, Layout and working of RHTC/UHTC 2. Observing and coordinating for National Health Programs for e.g. national immunization program, National program for Non communicable diseases, National Tuberculosis Elimination program, National leprosy eradication program, National Family Welfare program 3. Conducting and Coordination for National Health Surveys 4. Performing and Coordinating for School health camps 5. Monitoring for NCD clinics and Under 5 Clinics 6. Monthly meeting community health workers for planning and creating awareness about preventive, Promotive and Curative health services in the community. 7. Creating awareness in the community through health education, street plays 8. Maintaining communication with relevant stakeholders. 9. Learning and acquiring skills as public health administrator. 10. Attending the various seminars based on public health topics organized by Medical Colleges at Mumbai on every Saturday. 11. Participation and Coordination for Family adoption program. 12. Field visits in the areas for public health importance. 	270
Total		270 hrs

SKILL ENHANCEMENT COURSE

Name of the Program	Masters of Public Health
Semester	Semester - II
Name of the Course	Innovation and Entrepreneurship
Course Code	SEC 001 T

Course Outcome	<ul style="list-style-type: none"> • Students will grasp the concepts of innovation, its ecosystem, and the role of various stakeholders such as government policies, startups, and innovation hubs. • Cultivating an entrepreneurial mindset and leadership qualities necessary for driving innovation and leading ventures. • Understanding the intersection of technology and innovation and leveraging emerging technologies for entrepreneurial ventures.
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Sr. No.	Topics	No. of Hrs.
1	Innovation and Innovation Eco-System, The Policy Framework, Startup Landscape and Innovation Hubs, - Digital India and Make in India, - Linking Innovation with Intellectual Property Rights, Raising Finance for Startups in India, Innovation in Indian Context, Writing a business plan	15
2	Creativity and Research, Converting Researches to Innovation: Innovation Types and Models, Product Development, IPR and its Commercialisation, Support System to Develop Culture of Research and Innovation, Commercialisation of research and innovation, Fund raising – Research and Innovation, Envisioning Innovation and Scenario Building	15
3	Introduction to Innovation in Entrepreneurship, Idea Generation and Validation, Design Thinking in Entrepreneurship, Business Model Innovation, Technology and Innovation, Funding Innovation, Entrepreneurial Mindset, Leadership & Intellectual Property, Scaling and Growth Strategies, sustainability & Social Innovation	15
Total		45 hrs

Name of the Program	Masters of Public Health
Semester	Semester II
Name of the Subject	One Health (NPTEL)
Subject Code	SEC 002 T

Course Outcomes	<ul style="list-style-type: none"> • A comprehensive understanding of One Health's role in global health challenges, emphasizing interconnectedness among human, animal, and environmental health. • Topics include research ethics, disease surveillance, and successes in controlling emerging infectious diseases. • Students explore disease emergence, transmission, antimicrobial resistance, and food safety, gaining insights into effective public health strategies.
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Sr. No.	Topics	No. of Hrs.
1	Introduction to One Health : <ul style="list-style-type: none"> • Introduction to the One Health One Medicine Concept and National & International health/public health agencies • Global Health vs One Health • Basics of Research Ethics • Integrated human and animal disease surveillance systems • Recent success of One Health in control of emerging infectious diseases and the application of One Health in the control of endemic zoonoses in resource-poor communities 	5
2	Emerging Infectious Diseases and Antimicrobial Resistance: <ul style="list-style-type: none"> • Emerging infectious diseases • Process of disease emergence and assessment of the risk factors • Mechanisms of pathogen cross over across species boundaries and emerging infectious disease transmission, and its relevance in the 21st century • Importance of disease detection, Identification and monitoring in public health and the gaps in current health systems approaches and importance of Genome Sequencing • Introduction to disease vectors and basics of Medical Entomology • The factors influencing an emerging disease (whether is controlled or becomes endemic/epidemic as illustrated by different emerging diseases -STDs, HIV/AIDS, avian influenza, SARS, Ebola) • Antimicrobial resistance a global threat and Importance of antibiotic stewardship program • Introduction of Food Safety and Food Borne Diseases 	10
3	One Health Application in Management of Zoonotic Diseases: <ul style="list-style-type: none"> • What are zoonotic diseases & its role in our changing world • Understanding of bacterial, viral and parasitic zoonotic diseases; critical evaluation of its control measures, awareness of local, national and global factors and Influences • Biogeography of zoonosis • The integration of human, animal and ecosystem health in the control and prevention of these diseases • Community engagement for zoonotic disease control in humans and animals through One Health 	10

4	Applied Epidemiology & Public Health in One Health Research: <ul style="list-style-type: none"> • Basics of Epidemiological Studies • Rapid Response system, Disaster Management and Outbreak Investigation Plans • Basic statistical methods and their application and the measurement of disease frequency • Principles of survey design and the concepts of sampling • Mixed method research 	5
5	One Health and Health Policy: <ul style="list-style-type: none"> • Introduction to health policy • Political and institutional challenges in implementing One Health and the importance of a unified policy to address the shared health threats of humans and animals 	5
6	Media & Community engagement for One Health: <ul style="list-style-type: none"> • Risk Communication and Pandemic Preparedness • How ICMR and other Public Health Institutes tackled and managed pandemic situation in the country • Role of community in disease control & ways for community engagement • Uses of different types of media for communication and impact of the media on public attitudes to disease 	10
Total		45 hrs

***Note:** Attain the NPTEL Course with title and course code as “**One Health (Course Code: noc25-ge25) (NPTEL)**”.

Scheme of University Examination Theory for PG Program:

General structure / patterns for setting up question papers for Theory / Practical courses, their evaluation weightages for PG programs of MGMSBS are given in the following tables

Marks scheme for the University exam:

Final theory marks will be 100 marks (80 marks University Theory exam + 20 Marks Internal assessment).

Question		Marks distribution	Marks allotted per section	Marks
Sec: A	SAQ	1 x 10 M = 10	10	40
	LAQ	5 x 6 M = 30	30	
Sec: B	SAQ	1 x 10 M = 10	10	40
	LAQ	5 x 6 M = 30	30	
Total				80 Marks

Marks Scheme for the University Examination (50 Marks)

Final theory marks will be 50 marks University Theory exam pattern Research Methodology & Biostatistics (Core course)

Question	Question No.	Question Type	Marks Distribution	Marks
Sec: A	1.	LAQ (2 out of 3)	2 X 10 Marks = 20	20
Sec: B	2.	SAQ (6 out of 8)	6 X 05 Marks = 30	30
Total				50 Marks

Marks Scheme for the University Examination (100 Marks)

Final theory marks will be 100 marks University Theory exam pattern Elective Course

Question	Question No.	Question Type	Marks Distribution	Marks
Sec: A	1.	LAQ (10 out of 12)	10 X 10 Marks = 100	100
Total				100 Marks

Marks Scheme for the University Examination (40 Marks)

Final theory marks will be 40 marks University Theory exam pattern

Question	Question No.	Question Type	Marks Distribution	Marks
Sec: A	1.	LAQ (1 out of 2)	1 X 10 Marks = 10	10
Sec: B	2.	SAQ (6 out of 8)	6 X 05 Marks = 30	30
Total				40 Marks

Practical exam pattern Research Methodology & Biostatistics (Core course)**Total 50-mark distribution:**

Exercise	Description	Marks
Q No 1	Practical/Problem-Solving: These questions can assess statistical analysis, research design, hypothesis testing, or interpretation of data etc	2 × 10 marks each) = 20 marks
Q No 2	Identification of study designs, Critical appraisal of research papers, Application of biostatistical tools, Sampling techniques etc	(4 × 5 marks each) = 20 marks
Q No 3	Viva Voce (Oral Examination) Assessing conceptual clarity, application of research methodology, and statistical reasoning.	10 marks
Total		50 Marks

Practical to be conducted at respective departments and marks submitted jointly by the parent department to the university.

Breakup of theory IA calculation for 20 marks

Description	Marks
Internal exam (at department)	15 marks
Seminar	5 marks
Total	20 Marks

Breakup of practical IA calculation:

Description	Marks
Internal exam (at department)	10 marks
Viva	5 marks
Journal	5 marks
Total	20 Marks

Note –20 marks to be converted to 10 marks weightage for submission to the university.

Marks Scheme for the Internal Theory exam (10 Marks)

Question Paper	Question No.	Question Type	Marks Distribution	Marks Per Section
Section A	1.	LAQ (1 out of 3)	1 X 10 Marks = 10	10
Section B	2.	SAQ (2 out of 4)	2 X 05 Marks = 10	10
Total				20 Marks

Note –20 marks to be converted to 10 marks weightage for submission to the university.

Checklist for Evaluation of Practice of Public Health- Basic (MPH 104 CP)

Name of the student: _____ Date : _____

Program: _____

Semester: _____ Name of the Internal Faculty/Observer: _____

Core Competencies	Marks allotted	Marks obtained
Students will be prepared for leadership roles in the field through imparting multidimensional knowledge of public health systems. Students will develop critical thinking and professional skills in public health administration, operations, and facilities management, enabling them to work in areas such as policy formulation, planning operational action plans, managing and supervising various departmental activities, and conducting audits.		
Hospital Teaching		
a. Demonstrate competency in technical skills.	10	
Independent Work by Student guided by faculty		
a. Develop effective communication skills (verbally and through charting) with patients, team members, and family	2.5	
b. Identify intra and inter-professional team member roles and scopes of practice. Establish appropriate relationships with team members.	2.5	
Hands on practical work in field by students		
a. Protect confidentiality of electronic/manual records data, information, and knowledge of technology in an ethical manner	2.5	
b. Managerial aspects through various field postings	05	
Independent work by student		
a. Demonstrate expected behaviors and complete tasks in a timely manner. Professional behavior and appearance	2.5	
b. Logbook	05	
Project Report		
a. Presentation	10	
b. Viva	05	
Attendance	05	
Total	50 marks	
Sign of Internal Examiner: _____		
Sign of External Examiner: _____		

Checklist for Evaluation of Practice of Public Health – Advance (MPH 109 CP)

Name of the student: _____ Date: _____

Program: _____

Semester: _____ Name of the Internal faculty/Observer: _____ \

Core Competencies	Marks allotted	Marks obtained
Students will be prepared for leadership roles in the field through imparting multidimensional knowledge of public health systems. Students will develop critical thinking and professional skills in public health administration, operations, and facilities management, enabling them to work in areas such as policy formulation, planning operational action plans, managing and supervising various departmental activities, and conducting audits.		
Hospital Teaching		
a. Demonstrate competency in technical skills.	5	
Independent Work by Student guided by faculty		
a. Develop effective communication skills (verbally and through charting) with patients, team members, and family	2.5	
b. Identify intra and inter-professional team member roles and scopes of practice. Establish appropriate relationships with team members.	2.5	
Hands on practical work in field by students		
a. Protect confidentiality of electronic/manual records data, information, and knowledge of technology in an ethical manner	2.5	
b. Self-directed learning through various field postings	05	
c. Camp activities undertaken in postings	05	
Independent work by student		
a. Demonstrate expected behaviors and complete tasks in a timely manner. Professional behavior and appearance	2.5	
b. Projects / seminars / conferences / courses completed	05	
c. Logbook	05	
Project Report		
a. Presentation	05	
b. Viva	05	
Attendance	05	
Total	50 marks	
Sign of Internal Examiner: _____		
Sign of External Examiner: _____		



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A++' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410209

Tel 022-27432471, 022-27432994, Fax 022-27431094

E-mail- registrar@mgmuhs.com Website : www.mgmuhs.com

