



**PRAVARA INSTITUTE OF MEDICAL SCIENCES
(DEEMED TO BE UNIVERSITY)**

Loni, Tal. Rahata, Dist. Ahmednagar 413736

NAAC Re-accredited with 'A' Grade

SYLLABUS

**Post Graduate Degree Programme in Master of Public Health
(School of Public Health and Social Medicine)
(Academic Council Meeting Dated 28th October 2021)**

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SECTION I- RULES AND REGULATIONS FOR MPH PROGRAM

1. Nomenclature of Degree

Master of Public Health (MPH)

2. University

Pravara Institute of Medical Sciences, Deemed University

3. Constituent unit

Centre for Social Medicine

4. Faculty

This program is offered under the “Faculty of Allied Health Sciences”

5. Pattern of the program

The program adopts Choice Based Credit System (CBCS) and Grading System.

6. Background of the program

This program has been specially designed to meet the ever increasing demand for well trained personnel with advanced & appropriate skills and knowledge to plan and implement innovative Public Health Schemes and Programs at regional, national and international level

7. Duration of the Program

Duration of this program will be two academic years with four semesters. First semester will commence in the first week of August every year, second and fourth semester will commence in first week of January and third semester will commence in first week of July every year.

8. Medium of instruction- English

9. MPH Program Objective

The broad objective of Master of Public Health program at Pravara Institute of Medical Sciences Deemed University is to train human resources in the science of public health, with a firm understanding of the determinants of health and the public health system in the country, the community context, the determinative influences of globalization, urbanization, global and national policies and a strong foundation in research methodology.

The specific objectives of the program include

- 9.1 To equip students to have an overall perspective on public health
- 9.2 To create good program managers in public health
- 9.3 To inculcate interdisciplinary approach to problem solving skills in public health
- 9.4 To encourage interdisciplinary research in public health
- 9.5 To improve leadership skills in public health
- 9.6 Students will have:
 - Hands-on experience of handling public health projects and programs
 - Experience of independently designing, executing, and observing urban, rural and tribal health care delivery systems and innovative public health interventions

10. Highlights of the New Curriculum:

The New Curriculum intends to add immense value to all stakeholders by effectively addressing their requirements in more than one way

- Enhancing the brand value of the MPH programme by providing the much needed flexibility with CBCS.
- Focusing on 'Concurrent Evaluation' i.e. continuous evaluation throughout the programme.
- Empowering the Institutes through cafeteria approach - by providing Core, Elective, value and credit audit Courses.
- Supplementing traditional classroom teaching/learning with focus on group activity, seminar, role play, field work, experimental learning, self-study and research projects.

11. Eligibility for admission to the Master of Public Health Program

- Bachelor's degree in any Science subjects (biological, physical, mathematical, veterinary etc)
- Bachelor's degree in any medical (MBBS, BAMS, BHMS, BUMS), dental, nursing, physiotherapy, pharmacy, public health and other allied health sciences
- Bachelor's degree in Social & Humanitarian Sciences such as Anthropology, Sociology, Psychology, Journalism, Law, Social Work, Women Studies & Management etc
- Bachelor's degree other than the above mentioned subjects will be considered only if the candidate has a minimum of 5 years working experience in supervisory capacity in government or private/NGO sector in the field of Public Health.

All foreign or international university degree holders should submit their equivalence certificate from Association of Indian University (AIU) or respective statutory bodies like MCI, DCI, INC etc.

Candidates with minimum 50% marks (minimum 45% for SC/ST/OBC) in above subjects from any Indian University or their equivalent recognized degree from foreign University.

12. Selection of Students for Master of Public Health Program

- The selection of the students will be based purely on the merit of the marks obtained in the qualifying examination from any Statutory University in India or its equivalent degree from any other Statutory University abroad.
- Preference will be given to the candidates who have work experience in the field Public Health or its related fields.
- An "Admission Committee" appointed by the PIMS-Deemed University will screen the applications for eligibility and other conditions and oversee the admission process as per the guidelines of the University

13. After Selection procedures

- **Collect Provisional Admission Letter:** A provisional admission letter duly signed by the Director, CSM will be issued to all the admitted candidates.
- **Acceptance Letter of Admission:** The student to return the duly signed copy of the Provisional Admission Letter as acceptance of admission to the Director, Centre for Social Medicine.
- **Verification of Original Documents:** The following certificates will have to be submitted to the Office of CSM for verification at the time of finalizing the Admission of the Candidate. After confirmation of admission, all these documents will be retained by the Centre.
 - All Degree certificates & Mark sheets/Transcripts
 - Nationality Certificate/Domicile Certificate/Valid Passport/Aadhar Card
 - School or College Leaving/Transfer Certificate
 - Migration Certificate
 - Medical Fitness Certificate
 - Gap Certificate (if applicable)

These documents will be returned to the candidate after completion of the course.
- **Confirmation of Admission:** Admission will be confirmed only after receipt of the payment of Full Tuition Fee and other statutory fees & deposits, by the candidate within the stipulated time.

14. Procedure for Cancellation of admission

A candidate who has confirmed the admission may cancel it by submitting an application to the Director, Centre for Social Medicine along with the following document

- i) Application for cancellation duly signed by the candidate & Co - signed by parent/Guardian.
- ii) Original Fees Receipts.

Period of cancellation	Permissible Refund
Within Thirty days from date of admission	Entire amount of Annual Tuition Fees after deduction of processing fee of Rs. 1000/-
Within Forty five days from date of admission	Refund will be made after following deductions <ul style="list-style-type: none"> ● Rs.1000/- processing fee ● Deduction of monthly fee i.e. 10% of tuition fee
After forty five days of admission	No cancellation of admission, entire tuition fee has to be paid

- All Deposit will be refunded in full in case of cancellation of admission.
- The permissible refund will be made after three months from date of application for cancellation. No Correspondence in this regard will be entertained during this period.

Cancellation during the conduct of the course

In the event of failure to qualify to continue the chosen Programme, for what so ever reasons, the student will be liable to pay the complete course fee to secure NOC and return of original documents from the institute concerned. Application needs to be submitted to the Director of the college to this effect.

15. Course

- A “Course” is a component of programme, i.e. papers will be referred to as courses. Each course is identified by a unique course code. Papers from each semester will be given different codes i.e courses from semester I will be identified as MPH 101 onwards, likewise courses from semester II will be identified as MPH 201 onwards, semester III as MPH 301 and semester IV as MPH 401 onwards.
- EL refers to elective course (e.g. MPH 304 EL)
- A course comprises lectures/ tutorials/ laboratory work/practical/ field work/ project work /scenario based learning/ seminar/ workshop/ symposia/ CME/ conference etc. or a combination of some of these.

16. Program structure

Subject code	Title of Paper/ Practical	Subject code	Title of Paper/ Practical
SEMESTER I		SEMESTER II	
MPH 101	Introduction to Public Health	MPH 201	Communicable Diseases
MPH 102	Biostatistics	MPH 202	Non-communicable Diseases
MPH 103	Epidemiology	MPH 203	Population Science
MPH 104	Social and Behavioral Science	MPH 204	Research Methodology
MPH 105 EL	Human Biology <i>(Value Audit Foundation Course for non-medical students)</i>	MPH 211	Practical's based on MPH 201 to MPH 204
MPH 111	Practical's based on MPH 101 to MPH 104		
SEMESTER III		SEMESTER IV	
MPH 301	Health Policy, Economics and Financing	MPH 401	Public Health Nutrition
MPH 302	Environmental Health & Sustainable Development	MPH 402	Occupational Health
MPH 303	Reproductive and Child Health	MPH 403 EL1	Global Health

MPH 304 EL1	Law, Ethics and Human Rights in Public Health	MPH 403 EL2	Rural and Tribal Health
MPH 304 EL2	Health Systems Management and Informatics	MPH 404	Research Dissertation
MPH 305	Public Health Internship	MPH 405	Project Design and Management-(<i>Value Audit Course</i>)
MPH 311	Practical's based on MPH 301 to MPH 304	MPH 411	Practical's based on MPH 401 to MPH 403

- All students admitted to first year have to complete four theory subjects and a practical subject in First Semester. However, the students from non-medical background have to complete one additional Subject i.e. MPH 105-Human Biology as Value Audit Foundation Course. This additional course will help them to understand the mechanism and function of human body. This subject will be evaluated internally at college level.
- In Second Semester, students will have to appear for four theory and one practical subject, all subjects are compulsory.
- In third semester, students have to study three core subjects, one elective subject out of two i.e. MPH 304 EL and one practical.
- The public health internship of one month duration is compulsory component of the third semester which will be scheduled in the beginning of the semester.
- In fourth semester, students have to complete three core subjects, one elective subject out of two i.e. MPH 404 EL and one practical.

17. Attendance/Leave/Vacation

The student must meet the requirement of 75% attendance per semester per course for granting the term. The teacher handling a course shall be responsible for maintaining a record of attendance of students who have registered for the course.

All teachers shall intimate to the Director at least seven calendar days before the last instruction day in the semester the particulars of all students who have less than 75 % attendance in the course.

The Director shall have the right to withhold the student from appearing for examination of a specific course if the above requirement is not fulfilled. The Director, at the time of issuing hall ticket has to verify that the student is meeting the minimum requirement of attendance.

There will be no leave for the students during the academic session; however, due to unavoidable circumstances if the student proceeds on leave, s/he has to take prior permission from the Director/Course coordinator.

However, students will be given a 10 days preparatory leave before start of university examinations. The time between final university examination and start of the academic session of next semester will be considered as vacation for the students. All other rules for student's vacation will be as per the university guidelines.

18. Assessment/Examination

The final total assessment of the student shall be made in terms of an internal assessment and an external assessment. The internal and external assessment will constitute separate heads of passing and they will be shown separately in the marks sheet. For each paper meant for University evaluation, the ratio of marks for internal assessment in relation to external assessment shall be 30:70. The schedule of both the Internal and university examination will be communicated to the students through the academic calendar before starting the semester.

18.1- Continuous Internal Assessment (CIA).

CIA forms the Formative Assessment component of evaluation. It is structured to elicit the Students' domain knowledge, analytical and creativity skills. The internal assessment will be continuous throughout the semester. The CIA for each theory subject would have a total weightage of 150 marks which would be assessed in the following pattern for the components mentioned in the table. The marks received by the student in CIA will be converted in to 30 marks, as an internal assessment. If the marks obtained by the student in CIA are in decimal point, it will be rounded off to next digit. The CIA will be done by the subject teacher.

Midterm written test (50 Marks)	Pre final (Prelims) written test (70 Marks)	Field work/ Posting (10 Marks)	Seminar/GD (10 Marks)	Assignments/ Scenario based study (10 Marks)
To be conducted in the mid of semester	To be conducted just before university exam	Public health posting/ field work	2 seminar/ subject/ semester	2 assignments /subject/ semester

The value/credit audit courses (i.e MPH 105-Human Biology and MPH 405- Project design and management) will be assessed internally through the written test which will be conducted at the end of semester. The test will be conducted for 50 marks. Passing in these subjects is compulsory for the students in order to complete the MPH degree. Students who get 40 % marks in these subjects in the written examination will be declared as pass and the result will be communicated to the university. The result will be mentioned as pass or fail on the final mark sheet.

The CIA for practical subject for all the semesters will be conducted in following manner.

Midterm written test (50 Marks)	Pre final (Prelims) written test (140 Marks)
Experiment- 1*20 Marks Exercise/Scenario based question-1*15 Marks Viva Voce-15 Marks	Exercise-2*20 Marks Exercise/Scenario based question-2*15 Marks Spots-5*4 Marks Viva voce-40 Marks Journal-10 Marks

The CIA for MPH 405-Research Dissertation will be conducted for the components mentioned below for 60 Marks.

Conference attendance	Research Publication	Research methodology Workshop
Students have to attend minimum one Conference	Students have to publish minimum one research paper.	Students have to attend minimum one workshop related to research methodology.
20 Marks	20 Marks	20 Marks

The marks of the CIA will be communicated to the university at the end of the semester before the university exams. The marks awarded by a teacher in the internal evaluation shall be immediately communicated to the student.

Reassessment of Internal Marks -in case of those students who have secured less than passing percentage of marks in the internal evaluation, the College should administer a separate internal test for these 30 marks in the subsequent semester before the university examination. In this case, the internal assessment will be through written test only (70 Marks). The marks of all other components of the CIA (except midterm test) will be carried forward and included in this test. Hence, the internal assessment in this case will be for 100 marks, which will be converted into 30 marks.

Internal assessment will be treated as separate head of passing and without passing the internal examination; students will not be allowed to appear for university examination of that particular subject.

18.2- External/University Assessment.

The university assessment for theory subjects shall be based upon the written examination to be held at the end of each semester. The written examination will be conducted for 70 marks by the university. The schedule of the examination will be communicated by the university well in advance. All rules regarding passing or university examination will be as per university rules.

19. Scheme of Examination.

The distribution of the marks as well as credits for all the courses under MPH will be as follows.

Subject code	Title of Paper/ Practical	Marks			Credits	
		Internal	External	Total		
SEMESTER I						
MPH 101	Introduction to Public Health	30	70	100	4	
MPH 102	Biostatistics	30	70	100	4	
MPH 103	Epidemiology	30	70	100	4	
MPH 104	Social and Behavioral Sciences	30	70	100	4	
MPH 105 EL	Human Biology (Value Audit Foundation Course for non-medical students)	50	Internal Assessment			
MPH 111	Practical's based on MPH 101 to MPH 104	60	140	200	8	
			Total Marks/Credits		600	24
SEMESTER II						
MPH 201	Communicable Diseases	30	70	100	4	
MPH 202	Non-communicable Diseases	30	70	100	4	
MPH 203	Population Sciences	30	70	100	4	
MPH 204	Research Methodology	30	70	100	4	
MPH 211	Practical's based on MPH 201 to MPH 204	60	140	200	8	
			Total Marks/Credits		600	24
SEMESTER III						
MPH 301	Health policy, economics and financing	30	70	100	4	
MPH 302	Environmental Health & Sustainable Development	30	70	100	4	
MPH 303	Reproductive and Child Health	30	70	100	4	
MPH 304 EL1	Law, Ethics and Human Rights in Public Health	30	70	100	4	
MPH 304 EL2	Health Systems Management and Informatics	30	70	100	4	
MPH 305	Public Health Internship	-	100	100	4	
MPH 311	Practical's based on MPH 301 to MPH 304	60	140	200	8	
			Total Marks/Credits		700	28
SEMESTER IV						
MPH 401	Public Health Nutrition	30	70	100	4	
MPH 402	Occupational Health	30	70	100	4	
MPH 403 EL1	Global Health	30	70	100	4	
MPH 403 EL2	Rural and Tribal Health	30	70	100	4	
MPH 404	Research Dissertation	60	140	200	8	
MPH 405	Project design and Management (Value audit course)	50	Internal Assessment			
MPH 411	Practical's based on MPH 401 to MPH 403	60	140	200	8	
			Total Marks/Credits		700	28
Total marks/credits for the program				2600	104	

The pattern of question paper will cover the entire syllabus. The theory paper will consist of SAQ and LAQ. However, the practical examination will cover the entire aspects of practical's, field postings, field visits and all other aspects which are not included in theory. Following is the subject wise details of examination scheme.

- **Theory subjects carrying 70 marks for university examination will be assessed with following method** (MPH 101, MPH 102, MPH 103, MPH 104, MPH 201, MPH 202, MPH 203, MPH 204, MPH 301, MPH 302, MPH 303, MPH 304, MPH 401, MPH 402, MPH 403)

Que.1	Short Answer Questions (SAQ)-Attempt any four.	40 Marks
A	Short Answer Question 1	10 Marks
B	Short Answer Question 2	10 Marks
C	Short Answer Question 3	10 Marks
D	Short Answer Question 4	10 Marks
E	Short Answer Question 5	10 Marks
Que.2	Long Answer Questions (LAQ)-Attempt any two.	30 Marks
A	Long Answer Question 1	15 Marks
B	Long Answer Question 2	15 Marks
C	Long Answer Question 3	15 Marks

The question paper should give equal weightage to all the topics in the course. The questions can be subdivided as per the demand of syllabus. The time allotted for the theory examination is 3 clock hours.

- **Practical subjects carrying 140 marks for university examination will be assessed with following method** (MPH 111, MPH 211, MPH 311, MPH 411)

Que. 1	Lab work/Experiment	40 Marks
A	Experiment 1	20 Marks
B	Experiment 2	20 Marks
Que. 2	Exercise/Scenario based questions (SBQ)	30 Marks
A	Exercise/SBQ 1	15 Marks
B	Exercise/SBQ 2	15 Marks
Que. 3	Spots	20 Marks
	5 spots * 4 Marks	20 Marks
Que. 4	Viva voce	40 Marks
Que. 5	Journal	10 Marks

- **The assessment of MPH 305-Public Health Internship and MPH-404-Research Dissertation for university examination will be as follows.**

Following is the breakup of assessment pattern for MPH 305- Public Health Internship. There will be no internal assessment for MPH 305. The assessment of the Public Health Internship will be carried out in following manner.

SN	Head of assessment	Marks
1	Report writing	50
2	Viva voce	50

Following is the breakup of assessment pattern for MPH 404- Research Dissertation

SN	Head of assessment	Marks
1	Dissertation writing	100
A	Literature Review	10
B	Research Methodology	30
C	Results and Discussion	40
D	Field Application of the research topic	20
2	Viva voce	40

All components of this assessment will be evaluated by the examiners appointed by the university during the exam.

20. Rule of passing.

The student will be declared as pass only when s/he scores minimum 50 % marks in internal as well as external examination. This rule is applicable to university subjects.

21. Promotion of student to next semester/year.

Students are permitted to carry-over all failed courses from first to second semester and from third to fourth semester. However, in order to get promoted to second year, students have to pass not less than eight theory/practical subjects. Students can keep the term for not more than two subjects while entering in the third semester (i.e. second year).

If the student does not clear the arrears at the end of second semester, s/he will take a break and reappear for the university assessments in the failed subjects in the subsequent semester and after passing s/he can enter in the second year of the course in next academic year.

22. Fees and payments.

The students have to pay the yearly tuition fee at the start of respective academic year in order to undertake the program. The fee structure will be decided by the university and will be revised / updated from time to time as and when it is necessary. The fee structure decided by the university at the time of entry of student in the program will remain same unless s/he completes the program. However, if the students fail to qualify to enter in second year, s/he still has to pay the entire tuition fee of the second year. The tuition fee will be collected for not more than two academic years from the students.

The other fees/charges during the academic program will be Field visit expenditure, caution money, ERP Software, Insurance, Blazer, Eligibility, Registration, examination fee etc.

23. Maximum Duration for completion of the Programme

The candidate shall complete the MPH Programme within maximum period of four academic years from the date of admission. The student will be finally declared as failed if s\he does not pass in all subjects within a total period of five years. After that, such students will have to seek fresh admission as per the admission rules prevailing at that time.

24. Grade/class Improvement

A Candidate, who has passed the MPH programme and desires to avail the Grade/class Improvement facility, may apply under Grade Improvement Scheme within five years from passing that Examination. S/he can avail not more than three attempts, according to the syllabus in existence, for grade improvement. S/he shall appear for University Evaluation of at least 3 Subjects for the purpose of Grade Improvement. However, if the candidate fails to improve the grade/class, the marks in the previous exam will be considered as final.

Section II- Syllabus of the Program (MPH)

SEMESTER I			
Course title	INTRODUCTION TO PUBLIC HEALTH	Course Code	MPH 101
Course duration	August to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To introduce students to the field of public health To give an overview of the determinants and measures of health To impart knowledge about status of health and disease: global and national 			
Course Content			
<ul style="list-style-type: none"> Introduction <ul style="list-style-type: none"> Definition Evolution of Public & Community Health Significance Scope and application of public health. Public health versus Medical care Challenges of Public health Population Medicine Health and Disease <ul style="list-style-type: none"> Changing concept of health Dimensions of Health Determinants of health. Indicators of Health Concept of disease and causation and natural history of disease. Concept of prevention and control International Classification of Diseases (ICD 10/11) Approaches to Public Health - <ul style="list-style-type: none"> Public health models in high (US, UK), middle (China, India) and low (Ethiopia, Zimbabwe). Morbidity pattern & Epidemiological transition in high, middle and low income countries with special reference to India. Overview of Health delivery system in India- <ul style="list-style-type: none"> Levels of Health Care Public Health care delivery system - Sub center, PHC, CHC, Rural hospitals, district hospitals and tertiary care hospitals. Roles and responsibilities of key public health functionaries- ASHA, AWW, Mukhya Sevika, CDPO, BDO, DHO & TMO, CEO ZP. Organization of Public health system <ul style="list-style-type: none"> Government systems in UK, USA, Germany, India, UAE Role of other sectors in public health- <ul style="list-style-type: none"> Private health sector, Indigenous system of medicine, Non-Governmental Organization/Voluntary Organization National and International public health institutions- <ul style="list-style-type: none"> ICMR, NIHFW, PHFI, NIN, NACO, WHO, ILO, World bank, FAO, CDC, UNFPA, UNICEF, UNESCO, United Nations Community Diagnosis & Needs Assessment- <ul style="list-style-type: none"> Methods and approaches-Bottom up approach Community perception and priorities on health and disease. 			
Practical's			
<ol style="list-style-type: none"> Visit to SC/PHC/RH Visit to Private/NGO hospital. Visit to Civil Hospital/THO/DHO to study role and functions. To design a public health model to address public health issue. To assess various communities need by family visits. (5 families/student) 			

SEMESTER I			
Course title	BIOSTATISTICS	Course Code	MPH 102
Course duration	August to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To introduce students to the use of bio-statistics in public health To train students in presentation and interpretation of data To train the students in application of statistical knowledge in designing research studies. 			
Course Content			
<ul style="list-style-type: none"> Introduction to Biostatistics <ul style="list-style-type: none"> Definition and Scope Role and Applications Advantages and Limitations of statistics in human biology and health care delivery Data <ul style="list-style-type: none"> Types of Data, Sources & Systems of Biostatistics Collection and organization of data & Scales of Measurement – Methods, Systems & Tools Classification & Presentation of Medical & Health Data -Tabular & Graphical Descriptive Statistics <ul style="list-style-type: none"> Measures of Central Tendency Measures of location Measures of Variability Coefficient of variation Normal Distribution & Normal Curve Probability & inductive Statistics <ul style="list-style-type: none"> Definition Scope & Applications in Public Health and Medical Sciences Standard Error of Mean, Proportion, Difference between two means & two proportions Survey and Sampling Methods <ul style="list-style-type: none"> Techniques & Sample Size Sampling distributions – Concept & Applications Inferential Statistics <ul style="list-style-type: none"> Concept and applications Estimating population values Statistical significance of a difference Tests of Significance – Concept and applications of Parametric Tests: Z test, X2 test, t-test, F- test, ANOVA Concept and applications of Non-parametric Tests Association & Correlation – Concept, Types and Applications Regression - Concept, Types and Applications Health, Vital and Hospital Statistics 			
Practical's			
<ol style="list-style-type: none"> To study the data management and its applications using Microsoft excel. Visit to Medical Record department of tertiary hospital to study hospital statistics. Sample size calculation using computer software's. To design a sampling technique, tool and collect the data from field survey 			

Course title	EPIDEMIOLOGY	Course Code	MPH 103
Course duration	August to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To familiarize students on concepts and use of epidemiology, methods to measure and describe health of populations and risk measurement. • To make student capable to discuss and develop population based perspectives to examine health related events and disease 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Definition, History, Aims, Basic principles • Measurement of morbidity- <ul style="list-style-type: none"> ○ Incidence, cumulative incidence, incidence density. ○ Prevalence: point prevalence, period prevalence • Disease burden : <ul style="list-style-type: none"> ○ Quality of life, survival rate, life table, YPLL • Measurement of mortality- <ul style="list-style-type: none"> ○ Mortality rates, ○ Crude rate (Birth and death) ○ Fertility rates, case fatality rates ○ Cause specific mortality rates ○ Proportion mortality rate ○ Infant mortality rates ○ Maternal mortality rate ○ Neonatal mortality rates ○ Other mortality rates • Epidemiological methods <ul style="list-style-type: none"> ○ Descriptive Epidemiology ○ Analytical Epidemiology ○ Experimental Epidemiology • Association and causation • Infectious disease epidemiology • Screening of diseases • Disease surveillance • Epidemic investigations • Overview of Social epidemiology <ul style="list-style-type: none"> ○ Definition, History, Aims, Basic principles & Methods • Uses of Epidemiology 			
Practical's			
<ol style="list-style-type: none"> 1. Calculations based on mortality rates 2. Calculations based on Morbidity 3. Calculations based on screening of diseases. 4. Calculations based on odds ratio, relative risk, attributable risk, population attributable risk. 5. Calculations based on five year survival, attack rate, case fatality rate. 6. To conduct disease surveillance in the community. 			

SEMESTER I			
Course title	SOCIAL AND BEHAVIORAL SCIENCE	Course Code	MPH 104
Course duration	August to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the knowledge to identify, critically review and apply a range of behavioral and social sciences, concepts, theories and models in public health practice. To train the students to identify, discuss social and behavioral factors that influence health seeking behavior and health disparities To identify and analyze the social, cultural and behavioral factors associated with health, illness 			
Course Content			
<ul style="list-style-type: none"> Life Span Developmental Psychology <ul style="list-style-type: none"> Cognitive development Psycho Social development Psychosexual development Moral and Ethical development Hierarchy of need Developmental tasks of adulthood and old age Social Psychology <ul style="list-style-type: none"> Social thinking- Self in the social world, social belief and judgment, behavior and attitude. Social influences-Culture and gender, conformity, group influence Social relationship- Prejudices / discrimination / stereotyping / dissonance, conflicts and conflict resolution, supporting health and wellbeing. Health Psychology <ul style="list-style-type: none"> Introduction Health behavior Factors predicting health behavior Theories of health behavior Modifying and enhancing health behavior Information, Education and Communication (IEC) <ul style="list-style-type: none"> Health Education-Principle and practice, approaches Health Communication-Theories, Models and Contents Message framing. Barriers of communication Health Counseling <ul style="list-style-type: none"> Introduction Interpersonal and intrapersonal development of counselor Theories, types, and techniques of counseling Guidance and counseling Psychotherapy-Behavior therapy, Cognitive behavior therapy, Multimodal therapy, Psychoanalysis 			
Practical's			
<ol style="list-style-type: none"> To conduct the counseling sessions To design and develop IEC material To design and develop a health education program. 			

Course title	HUMAN BIOLOGY	Course Code	MPH 105E
Course duration	August to December	Course type	Elective (Value Audit course)
Course Objective			
<ul style="list-style-type: none"> • To provide an understanding about the structure and function of the human body 			
Course Content			
<ul style="list-style-type: none"> • Human Anatomy <ul style="list-style-type: none"> ○ General Anatomy of Human body ○ Related medical terminology ○ Structure and function of organs and systems <ul style="list-style-type: none"> ▪ Digestive, Respiratory, Excretory, Circulatory and lymphatic, Musculo-skeletal, Nervous, Reproductive • Human Biochemistry <ul style="list-style-type: none"> ○ Introduction to Human Biochemistry and Related medical terminology ○ A review of the biochemistry of carbohydrates, fats, proteins, vitamins, and minerals in the context of human disease ○ Biochemical Laboratory Investigations –Role, Importance and application in Public Health. • Human Physiology <ul style="list-style-type: none"> ○ Introduction to Human physiology & Related medical terminology Functions of Respiratory, Cardiovascular, GIT, Reproductive and Circulatory system. • Human Microbiology <ul style="list-style-type: none"> ○ Introduction to human microbiology ○ Related medical terminology ○ Sterilization, Disinfection ○ Morphology of Bacteria and Virus (TB, Leprosy, Malaria, Typhoid, HIV, Hook worm, Round worm, Hepatitis, Polio) ○ Basic Principles & concepts of Immunology & vaccination ○ Microbiological Laboratory Investigations -Role, Importance and application in Public Health • Human Pathology <ul style="list-style-type: none"> ○ Introduction to human pathology ○ Pathological Laboratory Investigations –Role, Importance and application in Public Health 			
Practical's			
<ol style="list-style-type: none"> 1. Visit to Clinical Biochemical laboratory 2. Visit to Clinical Microbiology laboratory 3. Visit to Clinical Pathology laboratory 4. Visit to study the Central Sterilization Department. 			

SEMESTER I

Course title	Practical's based on MPH 101 to MPH 104	Course Code	MPH 111
Course duration	August to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the practical training in the students through demonstration, field visit, field survey and field studies. 			
Course Content			
<ul style="list-style-type: none"> The content of this course will be as per the practical's and field visits mentioned at the end of each course of semester I. 			

SEMESTER II

Course title	COMMUNICABLE DISEASES	Course Code	MPH 201
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To provide an overview of infectious diseases of public health importance • To understand the pathology, pathogenesis, clinical manifestation, mode of transmission, prevention and control of diseases of bacterial and viral etiology • To orient students about the national disease control programmes 			
Course Content			
<ul style="list-style-type: none"> • Overview of epidemiology of communicable diseases. • Respiratory diseases <ul style="list-style-type: none"> ○ Tuberculosis ○ ARI-Influenza-Swine flue ○ Measles, Mumps, Rubella ○ Ebola ○ Small pox, Chicken pox • Intestinal Disease <ul style="list-style-type: none"> ○ Diarrhoea, Food poisoning ○ Typhoid ○ Polio ○ Hepatitis ○ Worm infestations • Vector borne Infection <ul style="list-style-type: none"> ○ Malaria ○ Dengue ○ Lymphatic, Filariasis ○ Zika virus ○ Chikungunya fever ○ Japanese encephalitis • Zoonoses <ul style="list-style-type: none"> ○ Leptospirosis ○ Plague ○ Rabies • Contact : <ul style="list-style-type: none"> ○ STDs, AIDS ○ Tetanus ○ Leprosy • Emerging & re-emerging diseases • Hospital acquired infections • Recent global epidemic diseases 			
Practical's			
<ol style="list-style-type: none"> 1. Arthropods of public health importance (Identification and control) 2. Interaction with hospital acquired infection control committee 3. Vaccine (BCG, OPV, IPV, Measles, Rabies, TT, DPT, Pentavalent, Hepatitis) 4. Cold chain Management 5. Exercises on -Annual parasitic index, ABER, SPR, Filarial Index, Chandler's Index. 			

Course title	NON-COMMUNICABLE DISEASES	Course Code	MPH 202
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To give an understanding of the pathophysiology of some common NCDs. Classification, biochemistry, clinical manifestations, diagnosis and, treatment. • To understand the risk factors for common NCDs, and methods of disease control and health promotion • To give an understanding of the pathophysiology of some common mental health problems 			
Course Content			
<ul style="list-style-type: none"> • Overview and introduction to NCDs <ul style="list-style-type: none"> ○ Epidemiology of NCDs, ○ Risk factors ○ Prevention and management: general strategies • Some important NCDs and related national health programs: <ul style="list-style-type: none"> ○ Cancer ○ CHD ○ Hypertension ○ Rheumatic heart diseases ○ Diabetes ○ Blindness ○ Obesity ○ RTA ○ Genetic diseases • Mental Health <ul style="list-style-type: none"> ○ Concept of Mental Health ○ Burden of Mental diseases ○ Classification-Depression, Schizophrenia, Alzheimer's, Parkinson's, Senile dementia, Suicides ○ Clinical manifestations ○ Diagnosis and treatment and prevention ○ Intervention and support services ○ National Mental Health Programme ○ Substance Abuse-Tobacco, Alcohol use • Oral health Diseases <ul style="list-style-type: none"> ○ Dental Caries, Periodontal diseases ○ Gingivitis, Fluorosis ○ Precancerous lesions and conditions (Lichen Planus, Leukoplakia, Oral sub mucous fibrosis, Candidiasis) 			
Practical's			
<ol style="list-style-type: none"> 1. Visit to Cancer registry. 2. Visit to de-addiction center. 3. Visit to Mentally challenged school. 4. Visit to diabetes registry. 5. Visit to dental hospital to study oral health diseases. 			

Course title	POPULATION SCIENCES	Course Code	MPH 203
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To familiarize students on the fundamentals of population studies and its links with health, family planning, population policies and programmes • To train the students in using demographic tools in understanding public health issues. • To train the students in application of various demographic methods in public health study. 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Definitions ○ Scope and nature ○ Historical review ○ Demographic transition ○ Demographic dividend-Concept, scope and applications. • Demographic Data Collection <ul style="list-style-type: none"> ○ Primary and Secondary sources of data collection ○ Procedures ○ Uses ○ Strengths and weakness of census ○ Vital statistics ○ Sample survey, Dual reporting system – SRS ○ Data from national health program/disease surveillance, hospital statistics, police records, remand homes etc. • Population composition <ul style="list-style-type: none"> ○ Sex composition and factors affecting sex composition ○ Age structure and Population pyramids, Impact of various demographic processes on the age structure. ○ Comparison – developed and developing countries. • Fertility <ul style="list-style-type: none"> ○ Determinants: Social, economic, political, ○ Natural fertility levels and trends in India and world, ○ Measures of fertility ○ Impact of level of fertility on reproductive health, ○ Policies about fertility control. • Mortality <ul style="list-style-type: none"> ○ Measures of mortality ○ Causes of Death: epidemiological perspective, ○ Trends of Mortality in India, ○ Differentials in mortality in developed and developing countries. • Migration and urbanization: <ul style="list-style-type: none"> ○ General terms and concepts ○ Internal migration, Measures of migration, Differential migration, International migration, Migration in India. ○ Urban challenge of health and environment. • Population Growth and Problems <ul style="list-style-type: none"> ○ Population growth ○ Rural-urban distribution of growth pattern ○ Population growth and related problems. • Population Policy <ul style="list-style-type: none"> ○ Health planning in terms of Family planning, Health services, vital processes. ○ Policies and programs influencing demographic processes in the context in India's population. 			
Practical's			
<ol style="list-style-type: none"> 1. Calculation of fertility and mortality rates 2. Visit to district census office 3. To conduct demographic survey 4. Exercises on population trends and growth. 			

SEMESTER II			
Course title	RESEARCH METHODOLOGY	Course Code	MPH 204
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To introduce students to research methods To train students in appropriate selection of methodology To train the students in writing the research proposals. 			
Course Content			
<ul style="list-style-type: none"> Introduction <ul style="list-style-type: none"> Definition, Uses, Characteristics, Objectives, Motivation, Pre-requisites Major areas of health systems research Problems encountered by researchers Types of Research & Scientific Foundations of Research Research Methodology and process <ul style="list-style-type: none"> Methods and Process/ Cycle Identification and Prioritization of Research Problems / Areas Literature Search Formulation of Objectives, Research Questions and Hypothesis Planning the Measurements, Scales of Measurements Study Design Options-Quantitative Research <ul style="list-style-type: none"> Introduction, concepts, decision algorithm for selection of particular design Bias and Confounding, Basic Risk Measurement, Association and Causation Exploratory, Descriptive (cross-sectional, epidemiological), Analytical Observational (case-control & cohort), Prospective & Retrospective studies Diagnostic/experimental/ interventional designs, principles of experimental & quasi experimental studies (randomization, replication & local control) – CRD, RBD, Latin square, Factorial Qualitative Research <ul style="list-style-type: none"> Concepts, Purpose, Methods Classification of research procedures/techniques and Variables Statistical tools and measurements in research <ul style="list-style-type: none"> Types of variables, Scale of measurement, Data collection methods, Techniques, Tools/instruments, Data editing & data grouping Data Collection <ul style="list-style-type: none"> Sampling methods/techniques Determination of Sample Size Designing research instruments, Interview Guides and Skills Data analysis and Management <ul style="list-style-type: none"> Analysis of Quantitative Data – Descriptive and inferential statistics Analysis of Qualitative Data Data Management Ethical Issues & Aspects of Health Research Construction of a Research Proposal Writing of thesis and Research Articles 			
Practical's			
<ol style="list-style-type: none"> To develop a research proposal Critical appraisal of research article. Application of statistical software's in data management and analysis – e.g. SPSS To conduct the Focus Group Discussion (FGD) To conduct in depth interview (IDI) To Study PRA technique (Venn diagram, seasonal calendars, Resource mapping, Income & expenditure matrix etc). To study review of literature (online and offline sources of literature) 			

SEMESTER II			
Course title	Practical's based on MPH 201 to MPH 204	Course Code	MPH 211
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the practical training in the students through demonstration, field visit, field survey and field studies. 			
Course Content			
<ul style="list-style-type: none"> The content of this course will be as per the practical's and field visits mentioned at the end of each course of semester II. 			

SEMESTER III			
Course title	HEALTH POLICY, ECONOMICS AND FINANCING	Course Code	MPH 301
Course duration	July to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To train the students in health policy issues pertaining to public health. To orient the students to international health policies. To give the basic introduction to health economics and financing in health care 			
Course Content			
<ul style="list-style-type: none"> Health Policy <ul style="list-style-type: none"> Overview of health policies Health policy Research policy Women policy Child policy Drug policy Policy Development <ul style="list-style-type: none"> Need Assessment Policy Development Policy Implementation Policy Evaluation, SWOT analysis International Health Policies <ul style="list-style-type: none"> Alma Atta and Primary Health Care Millennium Development Goals (MDG's) Sustainable Development Goal (SDG's) Healthcare Legislation in India: <ul style="list-style-type: none"> Medical Termination of Pregnancy Act, The maternity benefit act, The immoral traffic (prevention) act The transplantation of human organs act PCPNDT Act The registration of birth and Death act The child labor (prohibition and regulation) act COPRA Act Disability Act. Health Missions <ul style="list-style-type: none"> National Rural Health Mission (NRHM) National Urban Health Mission (NUHM) National Health Mission (NHM) Health Economics <ul style="list-style-type: none"> Health economics Budgeting techniques Investment in Health Care & Public health National income-GDP, GNP and NNP Health Financing <ul style="list-style-type: none"> Financing of Health Care – Public, Private & Community/Individual Resource allocation Health Insurance Schemes, community health insurance schemes Development Partners in Public health, Public Private Partnership (PPP) 			
Practical's			
<ol style="list-style-type: none"> To study the implementation of PCPNDT act. To study the implementation of MTP act. Visit to study the PPP model. To study the budget planning for various activities 			

SEMESTER III			
Course title	ENVIRONMENTAL HEALTH & SUSTAINABLE DEVELOPMENT	Course Code	MPH 302
Course duration	July to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To train the students in the basic concepts of environmental health sciences and key environmental health issues. To impart the knowledge of disaster management, Environmental and health impact assessment. To study the role of sustainable development in Public health. 			
Course Content			
<p>ENVIRONMENTAL HEALTH</p> <ul style="list-style-type: none"> The Concept and Scope of Environmental Health- <ul style="list-style-type: none"> Definition Types of environment in context to public health Environmental Pollution <ul style="list-style-type: none"> Sources, Impacts and control measures of Air (Indoor/Outdoor), Water, Noise, Solid waste, biomedical waste pollution. Development & Environmental issues <ul style="list-style-type: none"> Environmental Ethics, Global Warming, Climate Change Ozone Depletion, Acid Rain Eco-friendly environmental practices <ul style="list-style-type: none"> Waste management Energy practices Agriculture Practices. Disasters Management <ul style="list-style-type: none"> Definition, Types and management. Environment & Health Impact Assessment- <ul style="list-style-type: none"> Concept, Steps and application <p>SUSTAINABLE DEVELOPMENT</p> <ul style="list-style-type: none"> Development <ul style="list-style-type: none"> Concept, Definition & Theories (Modernization, structuralism, dependency, basic needs, neoclassical, sustainable, human development) Challenges of present development models and threatened future, New approaches to environment & development Sustainable Development <ul style="list-style-type: none"> Concept and Definition Principle and Models Common Concerns of Sustainable Development <ul style="list-style-type: none"> Development & environment – dichotomy Environmental priorities for development Equity and common interest, strategic imperatives Role of international economy, markets, governments and the environment Common Challenges of Sustainable Development <ul style="list-style-type: none"> Population perspectives and human resources Food Security, Sustainable Agriculture, Species and ecosystems (resources for development), Energy, Economy & Environment (Sanitation, Clean water, Clean Air) Industrial growth and its impact, Urban development, Rural environmental policies and issues, Common Endeavours of Sustainable Development <ul style="list-style-type: none"> Managing the Commons, Peace, Security, development & Environment, Institutional and legal changes, Participatory Planning and Community Action 			
Practical's			
<ol style="list-style-type: none"> To study the Water quality analysis To study the Ecofriendly practices Estimation of CI demand of water Visit to Incinerator for BMW Visit to Water treatment plant Visit to waste water treatment plant Visit to swimming pool and market sanitation. 			

SEMESTER III			
Course title	REPRODUCTIVE AND CHILD HEALTH	Course Code	MPH 303
Course duration	July to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the knowledge to identify women's health issues that affect women throughout their lifespan from a public health perspective of health promotion and disease prevention Students should learn about factors affecting the health of mother and child, the existing services for mother and child 			
Course Content			
<ul style="list-style-type: none"> Introduction <ul style="list-style-type: none"> Definition, Concepts, History & evolution of RCH policy, FP policy, Services under RCH Package and programs - IMNCI, RCH I & RCH II, RMNCH+A, NRHM, URHM, NHM Gender and Health <ul style="list-style-type: none"> Status of women in society, Equity and Equality Role/ participation of women in family decisions (reproductive health matters) Life cycle approach Gender analysis framework, gender issues in different disease conditions. Maternal Health <ul style="list-style-type: none"> Antenatal Care-High risk pregnancy, Intra-Natal care, Post-natal care Maternal and perinatal mortality-magnitude, causes significance and prevention MCH problems; triad of problem in developing countries, Abortion and Post-abortion care, Prevention of unsafe abortion Women and child diseases of public health importance <ul style="list-style-type: none"> RTI's and STI's - Infection and Patho-physiology, screening and diagnosis, Social aspects: high risk behavior, economic costs of RTI's/STI's, HIV-AIDS, counseling, syndromic approach, Infection Prevention Practices HIV/AIDS: Mother to child transmission of HIV/AIDS, Screening, diagnosis, prognosis and treatment, targeted interventions for High Risk Groups, Care and Support for PLHIV/AIDS, worldwide/Global perspectives; the Indian scenario; Surveillance and control Cancer- Cervical and Breast cancer and related national health programs. Child and Adolescent Health: Growth and development <ul style="list-style-type: none"> Determinants, Anthropometrical/anthropological measurements, Normal growth; reference values, growth curve, growth chart, Behavioral development; milestones in infancy and childhood, Essential newborn care, Infant mortality-magnitude, causes, factors affecting, preventive and social measures Child Health Care-Rights of child, Social welfare program, ICDS, Breast feeding-importance, Exclusive breast feeding, immunization schedule, National policy for children 2013. Family Life Education <ul style="list-style-type: none"> Adolescence: Definition-adolescence, pubescence, Stages of development and their disorders; Nutrition in adolescence, prevention and care in illness. Adolescent sexual and reproductive health, adolescent boys, adolescence friendly health services, Physical, mental and social, School health, FLE Act, emergency contraception, youth clinics Quality Control Mechanisms and Frameworks with special reference to Quality of Family Planning and MCH/RCH Services. Male participation in Women's health/RCH 			
Practical's			
<ul style="list-style-type: none"> Calculation of RCH logistics To give indications, contraindications, side effects and failure rates of condom, copper T, oral contraceptive pills. To calculate contraceptive failure rate. To determine unmet need of family planning. To study JSY, RMNCH+A schemes at PHC. 			

SEMESTER III

Course title	LAW, ETHICS AND HUMAN RIGHTS IN PUBLIC HEALTH	Course Code	MPH 304 EL
Course duration	July to December	Course type	Elective
Course Objective			
<ul style="list-style-type: none"> • Gain an overview of public health ethics as a distinct field within health ethics • Demonstrate ethics and accountability at all levels (professional, personal and social) • Practice professional excellence, scientific attitude and scholarship 			
Course Content			
<ul style="list-style-type: none"> • Public Health laws and ethics • Human rights in public health • Role of governments in managing health of people • Public health regulations in Indian context • Public health information and privacy • Research ethics in public health • Regulations during emergencies and outbreaks • Addressing newer challenges: Bioterrorism, conflicts and emerging infectious diseases • Public Health laws in global economy • Global health hazards and security • Different forms of power, influential to policy making • Concept of governance and institutions • Different theories useful in policy analysis • Political nature of evidence for policy making in health • Written and verbal competence in communicating evidence to inform policy 			

SEMESTER III			
Course title	HEALTH SYSTEMS MANAGEMENT AND INFORMATICS	Course Code	MPH 304 EL
Course duration	July to December	Course type	Elective
Course Objective			
<ul style="list-style-type: none"> To understand various health systems and health care providers To develop, implement and monitor various public health programs To understand health planning and management. To study the principals and components of health informatics and MIS 			
Course Content			
<p><u>Health Systems Development</u></p> <ul style="list-style-type: none"> Introduction <ul style="list-style-type: none"> Introduction to various Health System Models- Centre, State and District level Health services philosophies. Health care committees. Integrated health care delivery-Preventive, Promotive, curative & rehabilitative. Indian Public Health Standards (IPHS). Levels of health care <ul style="list-style-type: none"> Primary, Secondary & Tertiary. Principal of Primary Health Care. Decentralized health care delivery system. Sustainable, Grassroots & Comprehensive Health Models. Health care providers <ul style="list-style-type: none"> Government, Private, Voluntary/NGO, Indigenous. Alternative systems of medicine (AYUSH) Health Sector Reforms <p><u>Health Planning and Management:</u></p> <ul style="list-style-type: none"> Public health planning and management techniques. Implementation and evaluation of health planning. Organization Behavior and Design. Resource Management <ul style="list-style-type: none"> Man, Material and Money Quality assurance and Quality certification of health systems <ul style="list-style-type: none"> ISO, NABH, NABL <p><u>Health Informatics</u></p> <ul style="list-style-type: none"> Introduction to Health informatics <ul style="list-style-type: none"> Principles of public health informatics Components of public health informatics e-Health and m-health Tele-health and telemedicine Management Information and Evaluation System 			
Practical's			
<ol style="list-style-type: none"> Visit to e-health center To study MIS of health care facility Visit to NABH/NABL accredited hospital/laboratory. Visit to PRI. 			

SEMESTER III			
Course title	PUBLIC HEALTH INTERNSHIP	Course Code	MPH 305
Course duration	July to December	Course type	Core
Course Objective			
<ol style="list-style-type: none"> 1. To provide the opportunity to the students to study the functioning of public health at grass root level. 2. To acquire practical knowledge of structure and function of public health program/policy/organization. 3. To expose the student to various programmes/activities in Public Health and develop a comprehensive understanding of programme design, strategies and planned intervention, research etc. 			
Course Description			
<p>Four Weeks of Public Health Internship is part of the MPH Program which should be facilitated by the college at any approved regional/national renowned Public/Community Health, Development, Research & Academic/Training Organizations. This course will be scheduled between Semester II & III. Report may be submitted at the start of Semester III.</p> <p>Students are expected to conduct following activities during the internship</p> <ul style="list-style-type: none"> • To collect the information about organization-Areas of expertise, bonafides, stakeholders, length of the work, type of organization (govt., semi-govt., NGO, voluntary, corporate etc.) • To learn about the different projects/programs (institutional/community based) run by the organization. • To be familiar with communication procedure between health workers and community. • To acquire practical knowledge & practices about project planning and implementation. • To discover the problems encountered & solutions arrived while implementing the project. • To learn about working of the Management information system (MIS). • To know about method and source of evaluation. 			
Suggestive Format for Internship Report Writing			
<ol style="list-style-type: none"> 1. Title of the project 2. About the organization 3. Introduction and objectives of the project/programme / organization 4. Funding agency – about the agency, how to get funding, Nature of funding agency 5. Staffing pattern of the project with their functions 6. Major activities being undertaken under the project 7. Results achieved so far (target Vs achievement) 8. Role of the candidate in the project/programme / organization 9. Project/Program Evaluation by the candidate. 			
Credit distribution			
Report Writing- 2 credits and Viva-voce- 2 credits			

SEMESTER III

PIMS (DU), Post Graduate Degree Programme in Master of Public Health-Syllabus, implemented from Academic Year 2021-2022

Course title	Practical's based on MPH 301 to MPH 304	Course Code	MPH 311
Course duration	July to December	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the practical training in the students through demonstration, field visit, field survey and field studies. 			
Course Content			
<ul style="list-style-type: none"> The content of this course will be as per the practical's and field visits mentioned at the end of each course of semester III. 			

SEMESTER IV

PIMS (DU), Post Graduate Degree Programme in Master of Public Health-Syllabus, implemented from Academic Year 2021-2022

Notification No. 80/2021

Academic Council Meeting dated 28.10.2021

Course title	PUBLIC HEALTH NUTRITION	Course Code	MPH 401
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To introduce the concept of nutrients and their physiological role in the daily diet • To understand the common nutritional disorders: physiological basis, measurement, Interventions • To impart the knowledge of evaluating community nutritional status • Identify and develop methodologies for nutritional intervention at individual, community and national level 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Definition of nutrition and nutrients ○ Principals of human nutrition ○ Role of nutrition in health and diseases ○ Classification of food (Food groups) ○ Balanced diet ○ Diet planning • Micro and Macronutrients and their deficiencies <ul style="list-style-type: none"> ○ Proximate Principal (Carbohydrate, Fat, Proteins) ○ Vitamins and minerals ○ Dietary antioxidants • Recommended dietary allowances • Community nutrition <ul style="list-style-type: none"> ○ National nutrition policy ○ National program in nutrition and their evaluation ○ Nutritional assessment ○ Diet survey ○ Socio ecology of nutrition ○ Socio-ecology on Nutrition • Nutritional problems <ul style="list-style-type: none"> ○ Protein Energy Malnutrition (PEM) ○ Vit. A deficiency ○ Iodine Deficiency Disorders ○ Nutritional Anemia ○ Problems of over nutrition ○ Lathyrism ○ Endemic fluorosis ○ Junk food and its implications. • Food hygiene <ul style="list-style-type: none"> ○ Milk hygiene, Meat hygiene ○ Sanitation of eating places, Food handlers • Food safety and food security <ul style="list-style-type: none"> ○ National Food security program ○ Food additives ○ Food adulteration-prevention and control ○ Food preservation ○ Food fortification and enrichment ○ Prevention of food contamination ○ Food labeling ○ Food toxins 			
Practical's			
<ol style="list-style-type: none"> 1. Estimation of fat content in milk 2. Determination of milk adulteration 3. Visit to milk dairy 4. Preparation of dietary plan for specific condition. 5. Visit to food establishment and health education of food handlers. 6. Community nutritional assessment 			

SEMESTER IV			
Course title	OCCUPATIONAL HEALTH	Course Code	MPH 402
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> • To impart the understanding of occupational hazards, and diseases related to workplace and its prevention • Students should be able to demonstrate the knowledge and skills needed to identify workplace problems and advance safe, healthy work for oneself or others 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Definition and concept of occupational health ○ Fundamentals of occupational Health. ○ Occupational Environment ○ Principles of occupational Health • Occupational Hazards <ul style="list-style-type: none"> ○ Types of Hazards ○ Prevention of hazards • Occupational diseases <ul style="list-style-type: none"> ○ Major pneumoconiosis ○ Minor pneumoconiosis ○ Lead poisoning ○ Occupational Dermatitis ○ Occupational cancers ○ Musculoskeletal Disorders ○ Agriculture hazards • Ergonomics <ul style="list-style-type: none"> ○ Principals od ergonomics ○ Applications of ergonomics • Occupational Safety & Health <ul style="list-style-type: none"> ○ Risk assessment-Pre-placement examination ○ Chemical and physical exposures, ○ Control of occupational exposures and risk mitigation ○ Injury control ○ Access to health services ○ Industrial Hygiene ○ Industrial Psychology • Prevention and control of occupational diseases <ul style="list-style-type: none"> ○ Engineering measures ○ Legal measures ○ International Labor Organization (ILO) • Occupational health of unorganized sectors <ul style="list-style-type: none"> ○ Farmers ○ Commercial Sex Workers (CSW) ○ Daily wagers 			
Practical's			
<ol style="list-style-type: none"> 1. Visit to Industry to study the occupational health. 2. Health education to reduce the occupational risks. 3. To study various occupational exposures. 			

SEMESTER IV			
Course title	GLOBAL HEALTH	Course Code	MPH 403 EL
Course duration	January to June	Course type	Elective
Course Objective			
<ul style="list-style-type: none"> • To orient the students to global health and global burden of disease. • To impart the knowledge about International health agencies and health regulations. • To understand the MDG's and SDG's 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Definition and concept ○ Scope & importance ○ Challenges of global health • Global burden of disease <ul style="list-style-type: none"> ○ Overview of global diseases ○ Measurement of global health ○ Determinants of morbidity and mortality at global scale. ○ Sociocultural and economic factors affecting global health • International Health Agencies <ul style="list-style-type: none"> ○ Bilateral and multilateral ○ International non-government organizations (INGO) • International Health Regulations <ul style="list-style-type: none"> ○ IHR ○ Health Insurance Policies ○ Foreign Contribution Regulation Act (FCRA) • International Health Tourism and Emporiatics • International funding for health care & conditions <ul style="list-style-type: none"> ○ Structural Adjustment Program (SAP). • Millennium Development Goals (MDG's) and Sustainable Development Goals (SDG's) • Ethical issues in international health research. 			
Practical's			
1. Visit to an International organization working in the field of public health			

SEMESTER IV			
Course title	RURAL AND TRIBAL HEALTH	Course Code	MPH 403 EL
Course duration	January to June	Course type	Elective
Course Objective			
<ul style="list-style-type: none"> To introduce students to tribal and rural health To impart the knowledge on various determinants of tribal and rural health To orient the students to different issues of tribal and rural health 			
Course Content			
<p><u>Tribal Health</u></p> <ul style="list-style-type: none"> Tribal culture of India <ul style="list-style-type: none"> Tribal ethnography Territorial distribution Classification of tribes - linguistic, ethnic, economic, cultural Policies and programs of Government (State & Centre) for tribal health and development Organizations engaged in Tribal health & India Determinants of tribal health <ul style="list-style-type: none"> Social - <i>lifestyle, marriage, family, substance abuse and food habits,</i> Biological (<i>genetic</i>) Environmental (<i>hygiene & sanitation, proximity to animals, etc</i>) Concepts and challenges of tribal health care delivery Inequality in Health & Nutritional Status of tribals Concepts and challenges of food & nutrition security in tribal communities <p>Rural Health</p> <ul style="list-style-type: none"> Socio-political system and Strategies for building coalition in rural communities Health assessment in rural areas Access to healthcare in rural areas Rural health care budgets and financing Public health challenges in rural areas. Making a large and lasting impact Understanding community change Accountability through better paper work Community based development Development without wealth An Evolving balance between people and nature The role of conceptual and cultural breakthrough Case studies on: Curtiba-Brazil, Jamkhed and Gadchiroli-India, Kakamega-Kenya 			
Practical's			
<ol style="list-style-type: none"> Visit to tribal area Visit to rural village Visit to tribal health services. 			

SEMESTER IV			
Course title	RESEARCH DISSERTATION	Course Code	MPH 404
Course duration	January to June	Course type	Core
Course objective			
<ul style="list-style-type: none"> To enable the student to gain an in-depth insight into a particular field or topic chosen for study. To apply the knowledge of the research methodology in practical 			
Course description			
<ul style="list-style-type: none"> Based on the actual training imparted in the course, the student shall conduct a research dissertation under the guidance of a faculty. The topic for the research may be related to any current public health issue and can be selected in consultation with the guide and course coordinator. The topic for the research should be chosen based on an area of interest and should be done in a reputed organization or in community (research setting). The student should choose the research setting for the dissertation in any place where they could work under the constant guidance of the research guide allotted. 			
Course Content			
<p>The research dissertation is scheduled in the semester IV and the assessment will be done at the end of fourth semester. However, the students are expected to start the research dissertation in second semester itself.</p> <p>Steps in conducting research dissertation.</p> <ol style="list-style-type: none"> The guide allotment for the research dissertation will be done in First week of second semester. Students will have choice to select the guide in consultation with the respective faculty and course coordinator. The students should start developing the research proposal from the beginning of second semester while they study the theory subject Research Methodology. During this period they can consult with their guide, course coordinator and the subject teacher of research methodology subject. Once the proposal is ready, students have to apply in a prescribed form to Institutional Research Committee (IRC) for ethical clearance. This should be completed before the end of March. Students have to present their proposal before the Institutional Research Committee and get the approval. Students can complete their field work including data collection, data analysis and all other aspect during June to December (i.e. Third semester) During this time, students have to submit two progress reports i.e. first before 15th September and second in before 15th January. The progress report should be signed by guide and submitted to the IRC. Students are expected to attend minimum one workshop on Research Methodology before last semester. Students have to present their research finding in State/National/International conference or at least attend one National/International conference. Students also have to publish minimum one research article based on their research in the indexed national/international journal. Final submission of the research dissertation will be before 15th April of last semester. The format for the dissertation will be as prescribed by the university. The certificate of the paper presentation in the conference and paper publication should be attached at the end of the thesis. Four copies (five in case of co-guide) of research dissertation shall be submitted to the institution along with a soft copy. No dissertation will be accepted without guide's signature. 			

SEMESTER IV			
Course title	PROJECT DESIGN & MANAGEMENT	Course Code	MPH 405
Course duration	January to June	Course type	Credit audit course
Course Objective			
<ul style="list-style-type: none"> • To impart training in the methodology of developing a research proposal and scientific writing. 			
Course Content			
<ul style="list-style-type: none"> • Introduction <ul style="list-style-type: none"> ○ Project planning and management in health care & public health • Project Planning <ul style="list-style-type: none"> ○ Structure & Content – Personnel, Financial, Operational planning • Decision making tools for project planning <ul style="list-style-type: none"> ○ Logical Framework Analysis (LFA) tools ○ SWOT Analysis for project development • Project Life Cycle <ul style="list-style-type: none"> ○ Project identification, preparation & formulation ○ Project Proposal Writing ○ Project budgeting and financing ○ Project review and approval ○ Project execution/implementation • Project management <ul style="list-style-type: none"> ○ History, Roles & Responsibilities ○ Types of management (Strategic management, Operations management, Crisis management) • Project evaluation <ul style="list-style-type: none"> ○ Internal and external evaluation ○ Participatory evaluation Methods ○ Tools & Techniques (PERT, CPM) ○ Indicators for project evaluation • Fund raising for projects 			
Practical's			
1. To develop a project proposal for seeking funds from the developmental organization.			

SEMESTER IV			
Course title	Practical's based on MPH 401 to MPH 403	Course Code	MPH 411
Course duration	January to June	Course type	Core
Course Objective			
<ul style="list-style-type: none"> To impart the practical training in the students through demonstration, field visit, field survey and field studies. 			
Course Content			
<ul style="list-style-type: none"> The content of this course will be as per the practical's and field visits mentioned at the end of each course of semester IV 			



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