

KRISHNA INSTITUTE OF MEDICAL SCIENCES, KARAD

Dept. Of Community Medicine

Master of Public Health - 1505

Course Code :- Paper – 1st - 1505 - 11

Paper - 2nd -1505 - 12

Paper - 3rd - 1505 - 13

Curricula implemented by the university . (Resent 1920 Current)

Master of Public Health Syllabus

1. Preamble

The purpose of the Master of public (MPH) programme 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.

2. Objectives

To prepare public health practitioners have the:

At the end of course should be able to

- Knowledge and skills of community diagnosis
 - Ability to design strategies to enhance community health
 - Skills to implement intervention programs
 - Skills to develop public health policy
 - Knowledge to evaluate the impact of public health policies on community health
 - Leadership skills in public health administration
- II To evolve public health as a discipline in Indian Universities, with these

Departments having the objective of training public health researchers who will produce data for planning public health policies

3. Eligibility

The course will be open to students with an undergraduate degree in biological, clinical and Social sciences including B. Sc. (life sciences, nursing, pharmacology dietetics), B.A. (Anthropology, Sociology, Psychology, LL.B. Journalism) MBBS,BAMS, BHMS, BUMS, BDS, MSW Or students from any other discipline with evidence of work in the field of public health

4. Duration of course - Two
5. Medium of Instruction - English
6. Attendance - 80%\
7. Departments Required – Community Medicine Biostatistics

Semester I

A) Paper – I

a) Theory -75 Hrs (Credits – 5)

General Epidemiology :-

The concepts of disease

- Natural history of disease.
- Epidemiological triad.
- Dynamics of diseases transmission.
- Concept of disease control.
- Epidemiologic Methods-
- Descriptive and analytical
- Randomized control trial
- Infectious disease epidemiology
- Investigation of epidemic

b) Practical - (Hrs 60, Credits – 02)

- Water in relation to health and disease.
- Air pollution and ecological balance.
- Housing and health.
- Visit to water purification plant
- Visit to refuse disposal plant

A) Paper II

a) Theory (Hrs 60, Credits – 04)

Biostatistics:-

Collection/Organisation of data/measurement scales.
Presentation of data
Measurement of central tendency
Measures of variability.

Sampling and planning of health survey.
Probability, Normal distribution and inductive statistics.
Estimating population values.
Test of significance (parametric/Non-parametric including qualitative methods)
Analysis of variance.
Association, correlation and regression
Vital statistics
Evaluation of health and measurement of morbidity/mortality
Life table and its uses.
Use of computers
Census

b) Practical - (Hrs 60, Credits – 02)

Horrocks test

OT test

A) Paper III

a) Theory (Hrs 45, Credits – 03)

Sociology

Basic Concepts in Sociology

- Sociology: Definition, nature and scope; Relationship with other Social Sciences: Psychology, Anthropology, History, Economics, Political Science.
- Basic Concepts: Social Structure, Society, Social Organization, Community, Association, Norms, Values, Status and Role: Types of status and role and their interrelation
- Socialization: Meaning, types, processes and agencies. Theories of self (Freud, Cooley and

b) Practical - (Hrs 120, Credits – 04)

Community Diagnosis

Survey of the adopted Community

C) Generic electives - (Hrs 120; Theory 30 Practical 90 , Credits – 5)

▪ **Stress management**

a) Theory -

- Stress Eustress Distress Fight or Flight Negative Coping Techniques

Social Support Nutrition Sleep Time Management

Spirituality Comic Relief Positive Affirmations

b) Practical -

Relaxation Techniques Deep Breathing Muscle Relaxation Visualization Meditation Autogenic

Training Yoga

▪ **Personality development**

a) Theory

- Introduction to Personality Development
- The Developing Personality
- Stages of Development
- ‘Need’ a little personality?

b) Practical

- Basic Personality Traits
- Moral Development
- What’s your personality type?
- Hearing Jung Out
- Personality and Career Choice
- Changing Your Personality

D) Dissertation - (Hrs 60 , Credits – 2)

Selection of research topic

Preparation of protocol

Protocol review and ethical committee review.

M.P.H. Semester I

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper – I	Gen. Epidemiology	75	-	75	5	-	5
Paper - II	Biostatistics	60	-	60	4	-	4
Paper- III	Social Sociology.	45	-	45	3	-	3
Paper – I	Practical Course I - Visit to Water purification Plant - Visit to Refuse disposal Plant	-	60	60	-	2	2
Paper - II	Practical Course II - Horrock's test - O T Test	-	60	60	-	2	2
Paper - III	Community Diagnosis	-	120	120	-	4	4
GE	▪ Stress management ▪ personality development	30	90	120	2	3	5
	Dissertation	0	60	60	-	2	2
	Total	210	390	600	14	13	27

Semester – II

A) Paper I

a) Theory (Hrs 75, Credits – 05)

Epidemiology of communicable diseases.-

- Air borne infections.
- Exanthematous fevers.
- Chicken pox, Rubella, and Measles
- Factors responsible to eradicate small pox.
- Influenza and ARI.

- Diphtheria and Pertussis
- Tuberculosis.
- Faeco-oral infections.
- Poliomyelitis.
- Hepatitis.
- Enteric Fever and Cholera
- Bacillary and Amoebic dysentery.
- Soil transmitted Helminths.
- Tetanus
- Rabies and other Viral Zoonotic disease.
- Leprosy.
- Leprosy.
- Malaria
- Filariasis.
- Arthropod borne viral diseases.
- Sexually transmitted diseases and their control.
- A.I.D.S.

b) Practical - (Hrs 60 , Credits – 2)

Entomology - I

- Medical entomology
- Insects of medical importance

B) Paper - II

a) Theory –60 Hrs (Credits – 4)

Nutrition and Health.

- Constituents of food.
- Food and food groups.
- Diet planning and recommended dietary allowances.
- Nutritional diseases.
- Iodine deficiency disorders.
- Diseases due to vitamin and mineral imbalance
- Toxins in the food.
- Assessment of Nutritional status.
- Examination

b) Practical -(60 , Credits – 2)

Entomology - II

- Medical entomology
- Insects of medical importance

B) Paper - III

a) Theory –45 Hrs (Credits – 3)

Immunology

Introduction to immunology

- Types of immunity: nonspecific physiological and cellular barriers
- Acquired immunity- characteristics
- Antigen, Haptens and Adjuvants, Antibody
- Structure and types of immunoglobulins
- Types of immunoglobulins
- Distribution of immunoglobulins
- Function of immunoglobulins
- Cells and Organs of Immune system
- Organs of immune system – primary and secondary
- Cells of immunosystem
- Humoral Immuneresponse
- Cell mediated immuneresponse

b) Practical -(60 , Credits – 2)

Inspection of public places

- Hotels & Restaurants
- Slaughter houses
- Roadside vendors

D) Dissertation - (Hrs 180 , Credits – 6)

Selection of research topic
Preparation of protocol
Protocol review and ethical committee review.

M.P.H. Semester II

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper - I	Infectious disease	75	-	75	5	-	5
Paper - II	Nutrition and Health	60	-	60	4	-	4
Paper- III	Immunology	45	-	45	3	-	3
Paper - I	Entomology I	-	60	60	-	2	2
Paper- II	Entomology II	-	60	60	-	2	2
Paper- III	Practical Course inspection of Public Place	-	60	60	-	2	2

	Dissertation	-	180	180	-	6	6
	Total	180	360	540	12	12	24

Semester – III

A) Paper - I

a) Theory (Hrs 45, Credits – 03)

- **Non communicable diseases**

- Introduction
- Cardiovascular Disease
- Stroke
- Hypertension
- Diabetes Mellitus
- Obesity
- Blindness
- Cancer

b) Practical - (Hrs 30, Credits – 01)

Rural health center posting

OPD

IPD

Community survey in adopted community

Awareness campaign organization

B) Paper II

a) Theory (Hrs 45, Credits – 03)

OCCUPATIONAL HEALTH

1. Principles of Occupational Health

- Occupational Environment
- Occupational Hazards
- Absenteeism.
- Problems of Industrialization
- Health protection of Worker
- Prevention of Occupational Diseases

2. Legislation in Occupational Health

- Factories Act
- Employees State Insurance Act.
- Workmen's Compensation Act.
- Mines Act
- Plantation Labour Act.

3. Basics of Industrial Toxicology.

4. Principles of Industrial Psychology

5. basics of Ergonomics

b) Practical - (Hrs 30, Credits – 01)

Urban health center posting

OPD

Community survey in adopted community

Awareness campaign organization

C) Paper III

a) Theory (Hrs 30, Credits – 02)

Structure of MCH and Family Welfare Services in India.

- Problems of Maternal Health in India.
- Delivery of Maternal and Child Health Services.
- Trends in the MCH services.
- MCH related Programmes in India e.g. RCH,CSSM,ICDS.
- Family Planning.
- Methods of Family Planning.
- Indicators of MCH care.

b) Practical - (Hrs 60, Credits – 02)

Primary health center posting

OPD

IPD

National Health Programmes Implementation

Awareness campaign organization

C. Discipline specific electives - (Hrs 150 Theory 60;Practical 90, Credits –7)

i) Research Methodology

a) Theory

- Introduction to research
- Framing of research question
- Study designs

b) Practical

- Data collection tools
- Tests of significance
- Softwares used in data analysis
- Ethics in medical research

ii) International health agencies

a) Theory

- WHO
- UNICEF
- UNFPA
- Rockfellar foundation
- SIDHA
- DANIDA

b) Practical

- WHO
- UNICEF
- UNFPA

- Rockfellar foundation
- SIDHA
- DANIDA

D) Dissertation - (Hrs 120 Practical 120, Credits –4)

Data feeding and analysis

M.P.H. Semester III

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper – I	Non Communicable Diseases	45	-	45	3	-	3
Paper – II	Occupational health	45	-	45	3	-	3
Paper – III	MCH & geriatrics	30	-	30	2	-	2
Paper – I	Course I Rural Health Training Center	-	30	30	-	1	1
Paper– II	Course II Urban Health Training Center	-	30	30	-	1	1
Paper – III	Primary Health Center	-	60	60	-	2	2
DSE	▪ Research Methodology ▪ International health age nous	60	90	150	4	3	7

	Dissertation	0	120	120	-	4	4
	Total	180	330	510	12	11	23

Semester – IV

A) Paper I

a) **Theory** (Hrs 45, Credits – 03)

National Health Programmes

The origin, historical development, interventions, current state and critique of the different National Health Programmes: National Family Welfare Programme(NFWP).

- National Tuberculosis Control Programme
- National Leprosy Eradication Programme.
- National Diarrhoeal Diseases Control Programme
- National Malaria Eradication Programme
- National Filariasis Control Programme
- National Acute Respiratory Infections(ARI)Control programme.
- National AIDS control Programme.
- National Guinea Worm Eradication Programme
- National Kala Azar Control Programme.
- National Japanese Encephalitis (JE) Control Programme
- National Iodine Deficiency Disorders(IDD)Control Programme
- National Programme for the control of Blindness.
- National Cancer Control Programme
- National Mental Health Programme
- National Diabetes Control Programme
- Child Survival and Safe Motherhood (CSSM)
- Reproductive Child Health (RCH)
- Universal Immunization Programme.(UIP)
- National Water Supply and Sanitation Programme.
- Minimum Needs Programme.

The implementation of NHPs at a programme level and in the community.

b) Practical - (Hrs 30, Credits – 01)

Posting to Paediatrics (Hospital and ICDS)

- Paediatrics Infectious diseases.
- Nutritional problems
- Immunization
- Neonatal problems.
- Growth and Development monitoring

B) Paper II

a) Theory (Hrs 45, Credits – 03)

Nutrition and Health.

- Constituents of food.
- Food and food groups.
- Diet planning and recommended dietary allowances.
- Nutritional diseases.
- Iodine deficiency disorders.
- Diseases due to vitamin and mineral imbalance
- Toxins in the food.
- Assessment of Nutritional status.
- Examination

b) Practical - (Hrs 30 , Credits – 1)

Industrial visits
Visit to public health laboratory
Visit to rehabilitation center

C) Paper - III

a) Theory (Hrs 30, Credits – 02)

Demographic trends in India.

- Demographic cycle
- Trends in the world.

- Demography related indicators.
- Demographic trends in India.

School Health services.

- Objectives.
- Components of school health services.
- Planning of school health services.
- Care of handicapped children.
- Behavioural and learning problems in Children.

Social Paediatrics.

- Juvenile Delinquency.
- Child abuse.
- Child labour.
- Street children
- Child guidance clinic.
- Child marriage.
- Child placement

b) Practical - (Hrs 60, Credits – 02)

Posting to Obstetrics and Gynecology

1. Obstetrics

- Antenatal care
- High risk pregnancy
- Intranatal care-The management of normal labour.
- Postnatal care
- Family Welfare

2. Gynecology

- Adolescent health
- Reproductive Tract infections
- Cancer of the reproductive tract especially carcinoma cervix

C. Discipline specific electives - (Hrs 60 Theory60;Practical 90, Credits –7)

• Qualitative research-

a) Theory

Study design

Methodology

Data analysis
Focus group discussion

b) Practical

Study design
Methodology
Data analysis
Focus group discussion

• **Evaluation of national health policies**

• **a) Theory**

National health policy 1983
National health policy 2002
National health policy 2017
Millenium development goals
Sustainable development goals

b) Practical

National health policy 1983
National health policy 2002
National health policy 2017
Millenium development goals
Sustainable development goals

D) Dissertation --(Hrs Practical 120, Credits –4)

Practical -

Dissertation presentation and viva voce

M.P.H. Semester IV

Course	Course title	Number of Hours per semester		Total	Number of Credits / Semester		Total Credits
		Theory	Practical		Theory	Practical	
Paper – I	National Health Programme	45	-	45	3	-	3
Paper – II	Nutrition of health	45	-	45	3	-	3

Paper – III	Demography	30	-	30	2	-	2
Paper – I	Pediatric Posting	-	30	30	-	1	1
Paper– II	Industrial Visit (ergonomics)	-	30	30	-	1	1
Paper – II	Ob./Gyn. Posting	-	60	60	-	2	2
DSE	<ul style="list-style-type: none"> ▪ Qualitative Research. ▪ Evaluation of national health policies 	60	90	150	4	3	7
	Dissertation	0	120	120	-	4	4
	Total	180	330	510	12	11	23

Books :-

- 1) Oxford textbook of Public Health Ed. Roger Detels, James Mcewen, Robert Beaglehole, and Heizo Tanaka Oxford University Press (OUP) 4th Edition: 2002
- 2) Public Health at the Crossroads Achievements and Prospects. Robert Beaglehole, and Ruth Bonita 2nd Edition: Cambridge University Press
- 3) Maxcy – Rosenau-last Public Health & Preventive Medicine , Fourteenth Edition Ed Robert Wallace, MD, et al.
- 4) Epidemiology and Management for Health Care : Sathe, P. V. Sathe, A. P. Popular Prakashan, Mumbai, 1991
- 5) International Public Health: Diseases, Programs, Systems, and Policies by Michael Merson, Robert E Black, Anne J mills Jones and Bartlett Publishers.
- 6) Preventive and social Medicine , K Park, Bansaridas Bhanot Publishing House

Examination Pattern :-

Internal assessment examination will be converted to of 20 marks theory and 20 marks practical and will be added in End semester examination.

End semester examination:

Question Paper Pattern:

Theory: 80 Marks

Answer all the questions.

- I. Multiple Choice Question (MCQ) = $20 \times 20 = 20$
- II. Essay question : $20 \times 1 = 20$
- III. Long Answers (Answer 2 out of 3) = $2 \times 10 = 20$
- IV. Short Answers (Answers 4 out of 6) = $4 \times 5 = 20$

Total = 80 Marks

Practical:

Oral Examination: 30 Marks

Practical Examination 50 Marks

Total Marks : 80.

Total exam marks for end semester are 100 marks theory and 100 marks practical.

1. Promotion and award of grades

A student shall be declared PASS and eligible for getting he/she secures at least 50% marks in that particular course including internal assessment..

2. Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified ,then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

3. Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

Grading of performances

Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in table I

Table –I Letter grades and grade points equivalent to Percentage of marks and performances

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 – 100	O	10	Outstanding
80.00 – 89.99	A	9	Excellent
70.00 – 79.99	B	8	Good
60.00 – 69.99	C	7	Fair
50.00 – 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

18. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called ‘Semester Grade Point Average’ (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses(Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student’s grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students’ SGPA is equalto:

$$\text{SGPA} = \frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4 * \text{ZERO} + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the VIII semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all VIII semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C_1S_1 + C_2S_2 + C_3S_3 + C_4S_4 + C_5S_5 + C_6S_6 + C_7S_7 + C_8S_8}{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8}$$

where C₁, C₂, C₃,... is the total number of credits for semester I,II,III,... and S₁,S₂, S₃,... is the SGPA of semester I,II,III,.... .

19. Declaration of class

The class shall be awarded on the basis of CGPA as follows:

First Class with Distinction = CGPA of 7.50 and above

First Class = CGPA of 6.00 to 7.49

Second Class = CGPA of 5.00 to 5.99

20. Award of Ranks

Ranks and Medals shall be awarded on the basis of final CGPA.

21. Award of degree

Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

Final Mark list Of University Examination

Sr. No.	Semester	Internal Assessment		End Semester Examination		Total	
		Theory 20 marks	Practical 20 marks	Theory 80 marks	Practical 80 marks	Theory 100 marks	Practical 100 marks
1	Semester I						
2	Semester II						
3	Semester III						
4	Semester IV						

CBCS FOR Master of Public Health

Program: Master of Public Health

Department: KIMS

Subject: Public Health

Scheme: CBCS

Subject		Sem-I			Sem-II			Sem-III			Sem-IV			Total		
		T	P	Total	T	P	Total	T	P	Total	T	P	Total	T	P	Total
Core-I	Hr	90	120	210	90	90	180	60	60	120	60	60	120	300	330	630
	Cr	6	4	10	6	3	9	4	2	6	4	2	6	20	11	31
Core-II	Hr	90	120	210	90	90	180	60	60	120	60	60	120	300	330	630
	Cr	6	4	10	6	3	9	4	2	6	4	2	6	20	11	31
Total	Hr	180	240	420	180	180	360	120	120	240	120	120	240	600	660	1266
	Cr	12	8	20	12	6	18	8	4	12	8	4	12	40	22	62

Generic Elective – Any One

1. Stress Management
2. Personality Development

Discipline Specific Elective – Any One

- Semester III-**
1. Research Methodology
 2. International Health Agencies

- Semester IV-**
1. Qualitative Research
 2. Evaluation of National Health Policies

CBCS FOR Master of Public Health

Program: Master of Public Health

Department: KIMS

Subject: Public Health

Scheme: CBCS

Subject		Sem-I			Sem-II			Sem-III			Sem-IV			Total		
		T	P	Total	T	P	Total	T	P	Total	T	P	Total	T	P	Total
AEC	Hr	-	-	-	-	-	-	60	90	150	60	90	150	120	180	300
	Cr	-	-	-	-	-	-	4	3	7	4	3	7	8	6	14
Generic	Hr	30	90	120	-	-	-	-	-	-	-	-	-	-	-	-
	Cr	2	3	5	-	-	-	-	-	-	-	-	-	-	-	-
Dissertation	Hr	0	60	60	0	180	180	0	120	120	0	120	120	0	480	480
	Cr	0	2	2	0	6	6	0	4	4	0	4	4	0	16	16
Grand Total	Hr	210	390	600	180	360	540	180	330	510	180	330	570	750	1410	2160
	Cr	14	13	27	12	12	24	12	11	23	12	11	23	50	47	97