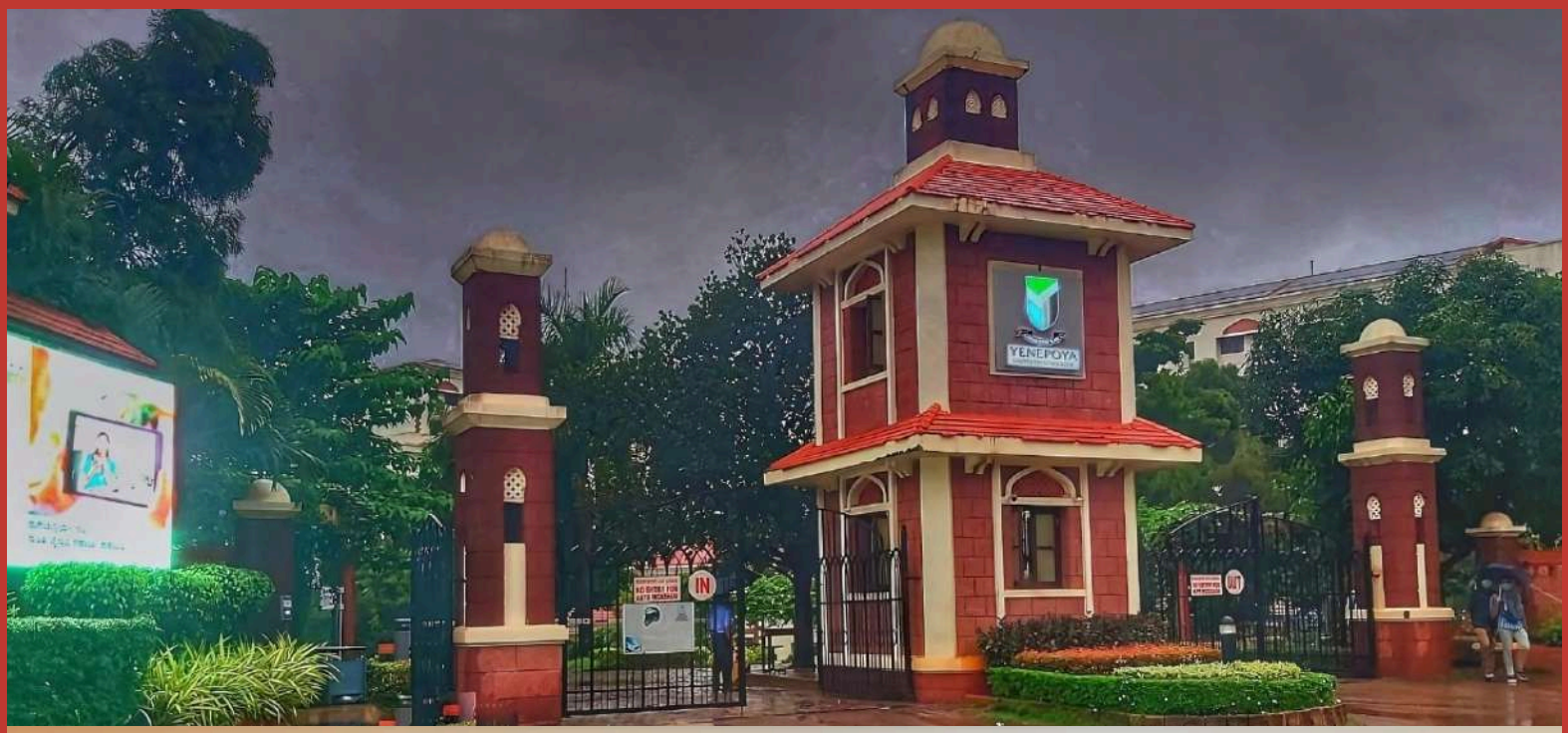

MASTERS OF PUBLIC HEALTH (MPH)

OFFERED BY

DEPARTMENT OF PUBLIC HEALTH

RABBI ZIDNI 'ILMA

YENEPOYA

(DEEMED TO BE UNIVERSITY)

ACCREDITED WITH GRADE A+ NAAC

IN ASSOCIATION WITH

ADVANCED TECHNICAL COOPERATION CENTER

EC Edward & Cynthia Institute of Public Health

ACADEMIC YEAR: 2025-2027

ABOUT YENEPOYA

YENEPOYA (DEEMED TO BE UNIVERSITY)

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Yenepoya (Deemed to be University) sprawling across 35 acres of lush green campus at Deralakatte, Mangalore has completed over two decades of commitment in the field of education. Established in the year 2008 by the Islamic Academy of Education Charitable Trust, the University has 10 constituent colleges with over 9000 students. Yenepoya (Deemed to be University) is accredited by NAAC with grade 'A+'.

The Islamic Academy of Education, a non-profit trust in its quest towards excellence in professional education decided to sponsor the formation of the "Yenepoya University Trust" with the sole purpose of creating a Deemed-to-be University in 2007.Recognising the yeoman service provided over the years by these institutions, the Ministry of Human Resource Development, Union of India, on the recommendation of the University Grants Commission granted recognition to Yenepoya University Trust, a Deemed-to-be University status under Section 3A of the UGC Act, 1956 (2008). This opened a new chapter in the history of Yenepoya Institutions.

Today, Yenepoya University has on its rolls nearly 9000 students. To prove that quality has been the signature of the institution, the University has been accredited by NAAC with grade “A+” and CGPA points of 3.47. The University has also been rated as a four-star institution with a Score of 585 out of 1000 in the category of YOUNG University by the Karnataka State Universities Rating Framework (KSURF).The Yenepoya has been ranked 85 among the top 100 universities in the country as per the NIRF Rankings 2023 published by the Ministry of Human Resource Development, Government of India. Yenepoya Dental College has secured 23rd rank among the top Dental Institutions in the country by NIRF.

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Yenepoya University lists in "Band A" in ARIIA Ranking under Self-Finance/Private Institutions category. Yenepoya Deemed to be University lists in 301 to 400 bands on “Times Higher Education” (THE) global Impact ranking. National Accreditation Board for Hospitals & Healthcare Providers (Constituent Board of Quality Council of India) has assessed and found to comply with NABH Accreditation Standards for Hospitals. Yenepoya Medical College Hospital Laboratory has been assessed and accredited in accordance with the NABL standards for its facilities in the field of Medical Testing.

The University has nine constituent units/centres/departments and located in a land area of 94.52 acres with built up area of 144,453.11sq.mt.
The main campus of the University is located in a 36.76 acre area at Deralakatte, Mangaluru. Four constituent colleges viz. Yenepoya Dental College and Hospital, Yenepoya Medical College and Hospital, Yenepoya Nursing College are located within the campus. The Ayurveda Medical College and Hospital and the Homeopathy Medical College and Hospital and Yenepoya College of Pharmacy and Research Centre are located in the Ayushgram Campus spread over 88 acres of lush green land in Naringana village, 5 km from Deralakatte.

The Yenepoya Institute of Arts, Science, Commerce and Management, a degree college housed in the City Campuses offering undergraduate programmes under Science, Humanities, Commerce and Management ,campuses located at the prime areas of Mangalore City, in the heart Balmatta and Kuloor.
The Mudipu campus houses the School of Allied Health Sciences, offering Physiotherapy and Medical Technology programs.

The saga of Yenepoya University is yet to unfold and greater achievements are round the corner as the Institution continues to stand by the logo of Yenepoya University, “RABBI ZIDNI ILMA” meaning “O Lord increase me in knowledge”.

ABOUT ECIPH

EDWARD & CYNTHIA INSTITUTE OF PUBLIC HEALTH

Edward & Cynthia Institute of Public Health (ECIPH) is an Advanced Technical Co-operation Center with Yenepoya (Deemed to be University) and a member of the Global Consortium of Climate & Health Education providing technical support to national governments, United Nations Agencies, India Inc and working with cross sectoral agencies in strengthening public healthcare. ECIPH works at the intersection of translating theoretical frameworks into policy actions through training, research, monitoring and programmatic support.

MASTER OF PUBLIC HEALTH

(Specialization: Epidemiology/ Maternal and Child Health/ Disaster and Emergency management)

Academic Curriculum and Credits:

The Masters of Public Health (MPH) programme aims to transform students into tomorrow's public health graduates who will contribute to improving the public's ability to live healthy and safe lives. Through inter sectoral training, they become a valuable asset in addressing the various determinants of health. The MPH programme is modular and runs over a period of 24 months. It is a full time on-campus academic program consisting of four semesters. The MPH program utilizes a variety of teaching/learning techniques, including lecture discussions, seminars, journal clubs, collaborative learning, group discussions, workshops, case studies, participant assignments, hands-on training, visits to organizations of public health interest, field work, practicum, field projects etc.

FEE STRUCTURE DURATION: 2 YEARS

TUITION FEES: RS. 2,67,000 / -

**This does not include admission confirmation fees, accommodation, international exchange programme, cost of books, stationery, certificates, food, field trips, dissertation, convocation etc.

PLACEMENT CELL:

We offer 100% placements around the world

REACH OUT TO US:

7619633674 / 9743576808

WHY OUR MPH PROGRAMME OFFERS A UNIQUE EXPERIENCE INTO LEADERSHIP TRANSFORMATION

2 year full-time course

In person training with customized guidance & global mentoring

50% practical exposure & 50% theory

Direct hands-on training

Field visits to strategic locations of importance

Interaction & association with world renowned leaders

AT THE END OF 2 YEARS YOU WILL HAVE ACCOMPLISHED

Industry recognition

100% placements

Published papers

Written chapters in books

World wide networking

Placement opportunities around the world

Publish policy briefs

Renowned in the public health sector

We have the world's best global public health experts whose work has influenced governments and communities and transformed paths for sustainable progress. Our Faculty, Advisors, collaborators will be interacting with our students in preparing them not just for a career, but for the industry and for life.

INTERNATIONAL PRACTICUM AND LEARNING AVENUES:

Places you can select as part of your learning experience with our collaborators

Australia

Azerbaijan

Hong Kong

UAE

USA

Iran

The Gambia

Uganda

HOW YOU BENEFIT:

A dedicated team that is field experienced & academically respected:

Our MPH Programme is not merely a degree. It is an experience built on years of craft, vision, mindset & brilliance not easily matched and is driven by a young bunch of leaders who drive global change.

The rare learning experiences and personalized mentoring they provide will be invaluable in the journey of evidence based public health and policy.

A global network connecting every continent on planet earth:

Yenepoya (Deemed to be University) and Edward & Cynthia Institute of Public Health (ECIPH) builds on the goodwill of a global friendship that is connected across every continent on earth. We believe in Vasudhaiva Kutumbakam and hence remain Indian at heart, global in intellect and spirit. You will get access to our circles in every corner of the world, making friends who will be your partner in progress for life.

Best minds across the nation:

You will be interacting with the best minds across the country and around the world and you will be prepared to engage with the brave & mighty !

Practical and Industry driven course:

We don't believe in making you theory champions. We believe in building your capacities to change the world, and we believe that if you are joining us, you have the potential to heal the world, one day, everyday.

We believe that public health in all policies will define the course of our world and working towards achieving Sustainable Development Goals and One Health is crucial to our existence and directly dependent on the future of how public health professionals deal with cascading risks which threaten global health and national security. Beyond classroom learning, you will have numerous opportunities to actively network with key policy professionals in your field of interest through symposiums and seminar sessions. You will also have the chance to share your thoughts on various policy topics through participation in conferences and hackathons.

Our world is at the cusp of a revolution. Global health today is the single most crucial deciding factor for social, commercial, environmental and economic determinants of health and life. Bringing about this change into visible action is a call for the brave! We face cascading risks due to natural disasters, climate change, extreme weather events and the public health consequences of it all. This is not a moment to worry about, but an opportunity to seize together, to shape the kind of world we imagine, to navigate complicated spaces in building policies that will influence generations to come after us. Your training will be tough, your resilience tougher and you will be carved into a powerful weapon of global influence upon whom destinies of millions will rest. For the brave.

THE EXTRAORDINARY GLOBAL PUBLIC HEALTH EXPERIENCE

- Blended Learning
- Research
- Field Work
- Policy Making
- Industry Engagement
- Working Papers
- CSR Programs
- United Nations
- Corporate Dialogue
- Global Relations

FREQUENTLY ASKED QUESTIONS

What is Public Health and why must we do this course?

Public Health is Public Wealth. Having a chance to professionally improve a society is the most beautiful thing you can ever do in life. This course opens up a broad sector of network which will help you at any stage in life and allows you to change your job into diverse arena of career scope. You don't have to be a healthcare professional to do public health. You only need the will to change the world. After COVID-19 happened, public health is now the foremost and most sought-after field which has the singularly powerful stance to influence human destinies.

What is the future in public health?

The future of humanity is public health and you are investing in the right discipline

Which sectors and institutions can we get a job in ?

- Ministry of Health & Family Welfare
- Ministry of Rural Development
- Research Institutions
- Medical Colleges
- Institutes of Public Health
- Private Foundations
- United Nations
- Non-Government Organizations
- Corporate Companies
- Pharmaceuticals
- Consulting Firms

What is the starting minimum salary we can expect?

Salaries start at entry levels above Rs. 35,000 and crosses Rs. 1,00,000 plus upon experience.

Can we work abroad with this degree?

Yes you can work in any international organization or the United Nations offices having vacancy and subject to you being selected.

For more information about the program you can write to us or call us.

OUR FACULTY MEMBERS:

Dr Edmond Fernandes

Dr Robin S

Amrut R H

Dr Ujjwala Gupta

Harshith

Dr R P Pai

Dr. Fatemeh Rezaei

LIFE AS A STUDENT IN MANGALURU CITY

Home to students and professionals from across India as well as other countries, Mangaluru City has acquired a cosmopolitan flavour that imbibes varied cultures. There is no dearth for entertainment in the city. The food is good and most importantly for students, affordable! You can have your pick of art galleries, trekking points, beaches, shopping malls, parks, cafes & restaurants.

BEACHES

When we imagine coastal lands, the first thing which comes to one's mind is coconut trees, golden sands, and pristine water and beaches in Mangaluru City are a utopia of this setting. From Panambur, Tannirbhavi, Chitrapura, Surathkal, Kodical, Someshwara, Ullal to Sasihithlu beach, each one of them has something unique of its own.

HILL STATIONS AROUND MANGALORE

You can find sprawling coffee plantations in hill stations like Coorg and Chikmagalur and take in the beautiful green landscape in Kudremukh, Wayanad, Nandi Hills and Kotagiri. You can also go trekking in quaint hill stations like Agumbe, Sakleshpur, Kodachadri, Hassan, Shimoga and Kemmangundi. These hill stations have an abundance of trekking trails, waterfalls, viewpoints, hillside resorts and many other attractive features that make them perfect vacation destinations.

CUISINE

The food is good and most importantly for students, affordable! Along with the mainstream seafood of the region, vegetarian food in Mangaluru City is undeniably epicurean. Neer dosa, sanna dukra maas, pork bafat, nurge gashie, sorpotel and mutton biryani are well-known dishes. Snacks such as happala, sandige, Mangalore buns and puli munchi are unique to Mangaluru City.

LANGUAGE

Unlike other cities in Karnataka or in India, Mangaluru City is a multi-lingual city where several languages such as Tulu, Konkani, Kannada, Beary, Malayalam, Hindi and English are spoken.

TRANSPORT

Mangaluru City is the only city in Karnataka to have all modes of transport—air, road, rail and sea.

EASE OF LIVING

Mangaluru City was ranked 20th in Ease of Living Index for 2020 by the Union Housing and Urban Affairs Ministry. It may cost you anything between Rs. 4000 – 8000 to rent a flat on sharing accommodation or to adjust into a paying guest facility. The city is generally considered to be safe for women. Irrespective of which state in India you belong to, Mangaluru City makes you feel welcome with its blend of people, culture and background.

Website:

Yenepoya (Deemed to be University) https://yenepoya.edu.in/

Edward & Cynthia Institute of Public Health: www.eciph.in

Interested Candidates may reach out to

admissionmanager@yenepoya.edu.in / yenoffice@yenepoya.edu.in

Secretariat:

Mr. Harshith Shetty: +91-7619633674 / Ms. Naseem: +91-8867754497

REGULATIONS AND CURRICULUM GOVERNING MPH PROGRAM 2025-27

CONTENTS

1. Preamble

The Department of Public Health at Yenepoya (Deemed to be University) holds the vision to advance the public's health through teaching learning and community involvement with focus on training next-generation public health professionals and translating evidence into policy decisions. In association with the Edward & Cynthia Institute of Public Health, our programs are a blend of theory and practical learnings unparalleled anywhere in the world. The skills you develop through this program positions you as an industry professional to meet any challenges and work in any environments. The department functions with an aim to bring sustainable health by a) Delivering evidence-based educational experience to prepare next generation public health professionals. b) Fostering expertise and leadership in public health through the acquisition of knowledge and skills in field practice. and c) Engaging in service activities that improve community capabilities to promote positive health.

With surging growth in the healthcare sector globally the demand for trained public health professionals is also on the rise. Despite the successes of the past, current challenges for public health are plentiful. There is a great need for development of public health policies and programs for prolonging healthy life expectancy. Emerging epidemiological transition shows that while old threats of communicable diseases continue, new infectious diseases may appear, and increasing incidence of non-communicable disease will overburden the health system in future. A cadre of Public Health Specialists who have sound scientific knowledge and skills to practice public health are required to tackle these emerging problems. It is a well-known fact that underlying causes of various diseases very often lie in socioeconomic, environmental, and behavioral domains rather than in biomedicine. Thus, with training, both non-medical and medical persons can make contribution to develop Public Health. As Public health professionals have to attend to the pressing needs of the changing health scenario, there is acute shortage of public health professionals throughout the world including India. Therefore, in several countries postgraduate courses in public health are being offered for both medical and nonmedical graduates. The emphasis is such educational programs as recommended by WHO is on a thorough training in public health administration as well as in epidemiology along with the study of relevant aspects of environmental and social sciences, i.e., health economics, health psychology and sociology.

The aim of the Master of Public Health Program is to prepare and equip public health professionals with the knowledge, skill and competencies required to deal with public health issues.

The postgraduate program in Public Health, with specialization in Epidemiology, Maternal and Child health, Disaster and Emergency management (at YDU), and Emergency management (at CSU) is meticulously designed to furnish students with the requisite knowledge, skills, and competencies to competently manage healthcare organizations across various capacities.

2. Outcomes of the programme

Programme Outcomes (PO) for Master of Public Health

PO 1: Equipped to engage with diverse population abiding with public health values, principles, and ethics.

PO 2: Critically and creatively engage with literature and theories in public health and related discipline to develop reflexive and informed public health practice in diverse social situations.

PO 3: Practice public health methods, and apply concepts and principles associated with health and disease in the prevention and control of diseases at individuals, groups, and community levels.

PO 4: Equipped to carry out independent research and publish in the world of public health literature for research informed practice and practice informed research.

PO 5: Will be skillful to apply principles of leadership, policy development, programme management, and academic engagement in a wide range of organizations and areas including implementation and evaluation of health programs for individuals and populations.

PO 6: Able to apply epidemiological principles and techniques including statistical techniques in the measurement and assessment of health and development needs of communities.

PO 7: Will be able to ethically engage with behavioral, social, and structural factors that impact health and disparities in health.

PO 8: Explain the value and role of disaster sciences for the practice of emergency management.

PO 9: Identify and describe the role of organizations involved at the local, state, national and international levels.

PO 10: Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of society.

Duration of study:

The duration of the MPH programme shall extend for a period of two years consisting of four semesters. Each semester comprises a minimum of 15 weeks with a minimum of 90 actual working days of instruction. The programme shall be pursued on a full-time basis. On successful completion of the required credits, the student will be awarded a Master's Degree in Public Health according to the chosen specialization by Yenepoya (Deemed to be University).

Medium of Instruction:

English shall be the medium of instruction for the subjects of study as well as for the examination.

Eligibility for admission

To be eligible for admission a candidate shall have obtained graduation in any one of the following from an institution recognized by responsible council wherever applicable: Bachelor's in Medicine (MBBS), Dental graduates (BDS), Graduates in any AYUSH, Veterinary sciences, Demography, Anthropology, population studies, Nursing, Pharmacy, Nutrition or Allied specialties, students with a degree in Social sciences, Psychology, Engineering, Management, Journalism, Home science, Biostatistics, Arts, Commerce, Law any other relevant degrees. The candidates shall have obtained a minimum of 50% aggregate of marks in all the years of university examination. In case of SC/ST/OBC candidates, the minimum marks shall be 45%.

Course of study:

The programme shall be pursued on a full-time basis. For the specialization of Emergency Management, the courses from the CSU are offered online.

Definitions of Key Words

I. **Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.

II. **Choice-Based Credit System:** The CBCS provides a choice for students to select from the prescribed courses (core, elective or minor or soft skill courses).

III. **Course:** Usually referred to, as 'papers' is a component of a programme. The courses shall define learning objectives and learning outcomes. A course shall comprise lectures/tutorials/ industrial training or field-based experience/outreach activities/ project work/ vocational training/viva / seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these. The courses can be of the following types i.e., Core, Discipline specific elective, Skill Enhancement Course, Multidisciplinary Elective, Internship.

IV. **Credits:** Credit defines the quantum of contents/syllabus prescribed for a course and determines the number of hours of instruction required per week. Thus, normally in each of the courses, credits will be assigned on the basis of the number of lectures/tutorial laboratory work and other forms of learning required, to complete the course contents in a 15-week schedule. All courses need not carry the same credits.

	Lecture (L)	Tutorial (T)	Practical/ Internship (P/I)	Field work practice
1 credit	1 hour	1 hour	2 hour	3-5 hour
12 credit	Research Project/Dissertation			

V. **Credit hours for different types of courses:** Each course may have only a lecture component or a lecture and tutorial component or a lecture and practicum component or a lecture, tutorial, and practicum component, or only practicum component. For example, a three-credit lecture course in a semester means three one-hour lectures per week with each one-hour lecture counted as one credit. In a semester of 15 weeks' duration, a three-credit lecture course is equivalent to 45 hours of teaching.

One credit for tutorial work means one hour of engagement per week. In a semester of 15 weeks duration, a one-credit tutorial in a course is equivalent to 15 hours of engagement.

A one-credit course in practicum or lab work, community engagement and services, and fieldwork in a semester mean two hours of engagement per week. In a semester of 15 weeks duration, a one-credit practicum in a course is equivalent to 30 hours of engagement.

A one-credit of Seminar or Internship or Studio activities or Field practice/projects or Community engagement and service means two-hour engagements per week. Accordingly, in a semester of 15 weeks duration, one credit in these courses is equivalent to 30 hours of engagement.

A course can have a combination of lecture credits, tutorial credits, and practicum credits. For example, a 3–credit course with two credits assigned for lectures and one credit for practicum shall have three 1-hour lectures per week and one 2-hour duration field-based learning/project or lab work, or workshop activities per week. In a semester of 15 weeks duration, a 3-credit course is equivalent to 45 hours of lectures. Similarly, a 3 –credit course with 2- credits assigned for lectures and one credit for tutorial shall have three 1-hour lectures per week and one 1-hour tutorial per week. In a semester of 15 weeks duration, a three-credit course is equivalent to 30 hours of lectures and 15 hours of tutorials.

While there is flexibility for the departments in allocation of credits to various courses offered, the general formula shall be:

- Every **Core course** shall be of minimum of 3 credits.
- **Discipline Specific Courses** (DSC) shall be of minimum 3 credits.
- **Skill Enhancement Courses** (SEC) will be calculated as **one credit for every 4 hours of field visit.** A maximum of 20 hours per week.
- The **Multidisciplinary open elective course** offered by the Yenepoya (Deemed to be University) shall be restricted to a maximum of 3 credits.
- **Internship** will be calculated as **one credit for every 2 hours.** A maximum of 24 hours of practical exposure per week is assigned, accounting for 12 credits.
- **Dissertation** is considered as a special course involving application of knowledge in solving/analyzing/exploring a real-life situation/difficult problem. A dissertation work would be of 12 credits.
- The credits assigned to the course are indicated in L:T:P format. For example, for a 3-credit course format could be: 3:0:0 or 1:1:1 or 2:1:0 or 0:0:3 etc.

VI. **Programme**: An educational programme leading to the award of a degree, diploma, or certificate.

VII. **Grade Point**: It is a numerical weight allotted to each letter grade on a 10-point scale.

VIII. **Credit Point**: It is the product of grade points and number of credits for a course.

IX. **Semester Grade Point Average (SGPA)**: It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.

X. **Cumulative Grade Point Average (CGPA)**: It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed in up to two decimal places.

XI. **Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters: O+, O, A+, A, B+, P, F.

XII. **Transcript or Grade Card or Certificate**: Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of that semester.

XIII. **Academic Bank Account**: means an individual account with the Academic Bank of Credits opened and operated by a student, to which all academic credits earned by the student from course(s) of study are deposited, recognized, maintained, accumulated, transferred, validated or redeemed for the purposes of the award of degree/diploma/certificates etc. by an awarding institution.

XIV. **Academic bank of Credits (ABC)**: means an academic service mechanism as a digital or virtual or online entity established by the Commission with the approval of the Central Government, to facilitate students to become its academic account holders, thereby paving the way for seamless student mobility between or within degree-granting Higher Educational Institutions through a formal system of credit recognition, credit accumulation, credit transfers and credit redemption to promote distributed and flexible teaching-learning

XV. **Credit-accumulation**: means the facility created by Academic Bank of Credits in the Academic Bank Account opened by students to transfer and consolidate the credits earned by them by undergoing Courses

XVI. **Credit-redemption**: means the process of commuting the accrued credits in the Academic Bank Account of the students maintained in ABC for the purpose of fulfilling the credits requirements for the award of Degrees or Diplomas or Certificates or Coursework for Ph.D. programme etc., by the registered degree-awarding Higher Educational Institutions

XVII. **Credit-transfer**: Means the mechanism by which the Registered Higher Educational Institutions are able to receive or provide prescribed credits to individual Academic Bank Accounts in adherence to the University Grants Commission credit norms for the 'course/s' undertaken by students enrolled in any Registered Higher Education Institution within India

Programme Structure

I: Semesters

An academic year shall consist of two semesters as follows:

Semester	Months
Odd Semester 1st & 3rd	September/October to February/March
Even semester 2nd& 4th	March/April to August/September

II. Specializations:

A specialization refers to a focused area of study within the broader framework of the MPH program. It involves the concentration of coursework, practical training, and research efforts on a specific topic or field of interest related to the overall program objectives. Specializations provide students with the opportunity to deepen their understanding, develop specialized skills, and gain expertise in a particular aspect of the subject matter.

The MPH program focuses on four specializations:

Specialization (S1): Epidemiology:

Epidemiology focuses on the concepts of health, disease, and levels of prevention. Students enrolled in this specialization delve into topics such as epidemiological measurements, various risk factors and its approaches for prevention of major diseases, application of epidemiological studies in research, principles of health informatics, data science, National Health Programmes, Monitoring and evaluation, surveillance and communicating epidemiological findings. Through coursework, case studies, and practical projects, students will learn how to identify areas for improvement, implement quality initiatives, and measure outcomes to enhance the overall quality of care delivery.

Specialization (S2): Maternal and Child Health (MCH):

Maternal and Child Health centered on life course perspectives in maternal health, conceptual and theoretical understanding of family planning, reproductive health, maternal, child and adolescent health. Students enrolled in this specialization explore the concepts related to women and child health, RMNCHA+N, develop an acquaintance with the MCH programs, understand

basic steps in the policy proposals and schemes available for women and children in India, also helps to identify the family welfare concepts, principles and role of health workers/administrators in implementing the programs.

Specialization (S3): Disaster and Emergency Management (DEM):

Disaster and Emergency management focuses on providing the value and role of disaster science for the practice of emergency management. Students enrolled in this specialization explore and understand the history and current status of emergency management, types of disasters, careers in and challenges of disaster and emergency management, types of organization at local, state, national and international level, promote a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education. This comprehensive approach ensures that students are equipped to handle the diverse challenges and opportunities in disaster and emergency management.

Specialization (S4): Emergency Management (EM)

Emergency management is a distinctive specialization offered in collaboration with Charles Sturt University, Australia, providing students with an unparallel opportunity to enhance their emergency management skills within the global healthcare sector. This specialization equips students with advanced knowledge, analytical and cognitive skills in Emergency Management theory and community based practical. Leveraging the memorandum of understanding (MoU) between Yenepoya (Deemed to be University) and Charles Sturt University, Australia, students would benefit from online access to globally renowned faculty and resources, ensuring a high-quality learning experience. The online course would provide flexibility for students to choose between a Graduate Certificate or Graduate Diploma in Emergency Management.

Students opting for Graduate Certificate in Emergency Management can register on a part time basis during the 2nd semester of MPH program and complete the coursework pathway specified by Charles Sturt University from one year of registration. Core and multidisciplinary elective courses of the 2nd semester of the MPH program, are required to be completed.

Students opting for a Diploma in Emergency Management will complete the coursework pathway specified by Charles Sturt University on a full-time basis and complete the courses as required, from one year of registration. Here the courses of the 2nd and 3rd semester of the MPH program will not be applicable.

The 4th semester will follow the program structure of the MPH program.

III. Types of Courses

Sl.No	Broad category of course	No of courses	Credits
1	Core Course (CC)	11	34
2	Multidisciplinary Elective (ME)	02	06
3	Skill Enhancement Course (SEC)	03	15
4	Discipline Specific Electives (DSE)	04	12
5	Internship	01	12
6	Dissertation (RP)	01	12
	Total credits	22	91

a. **Core course (CC)**: a course that should compulsorily be studied by a candidate as a core requirement is termed as a core course. This is the core requirement to complete the Master of Public Health

b. **Discipline Specific Elective (DSE)**: These are courses chosen within a specific academic discipline that offers focused study on specialized topics relevant to that discipline.

The postgraduate program in Public Health is structured around four groups of DSE for the specialization of S1, S2, S3 and S4.

Students will select their specialization in second semester and those who optS4 (at CSU): to be completed in semester 3.

NOTE:

i. S4 Discipline Specific Electives (DSE) will be completed as specified in the description provided for the Graduate Certificate/ Graduate Diploma in Emergency Management (CSU).

c. **Skill Enhancement Course (SEC)**: These courses are aimed at improving practical, professional & procedural knowledge requirements for carrying out the highly skilled task related to the field of study.

In the MPH program, SEC is structured as practical postings in various departments of organizations or healthcare centers, with a special focus on the student's chosen specialization. These practical/field visit postings occur in every semester and as an internship in the 4th semester.

d. **Multidisciplinary Elective Course (ME)**: Generally, a course which can be chosen from a pool of courses, and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope, or which enables an exposure to some other discipline or subject or domain or nurtures the candidate's proficiency skill.

- In accordance with the UGC (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2021, New Delhi, dated 25th March 2021, and reference No.F.1-100/2016 (MOOCs/e-content), students are encouraged to augment their learning experience by opting for Massive Open Online Courses (MOOCs), Study Webs of Active Learning for Young Aspiring Minds (SWAYAM), and Coursera courses as part of the multidisciplinary elective.

- The Department of Public Health will adhere to UGC regulations governing MOOCs/SWAYAM/Coursera courses, incorporating amendments as communicated by UGC over time.To facilitate the seamless completion of chosen courses, the department will appoint a designated course coordinator. The coordinator will guide and support students throughout the duration of the selected online courses.

- The evaluation process will adhere to predefined norms and parameters, which will be communicated in the course overview at the time of offering.

- In Coursera, the assessments are multifaceted and include quizzes or tests after each module, assignments or projects demonstrating the practical application of concepts, active participation in discussion forums, and peer-reviewed assessments. The culmination of each course involves final quizzes or capstone projects tailored to the course's content. Upon successful completion, students receive an online certificate, Yenepoya (Deemed to be University) will integrate the acquired credits into the student's official marks sheet.

- In SWAYAM, Assessment will include formative continuous online assessments and end-of-course proctored exams, all of which are mandatory for successful completion by the student. Yenepoya (Deemed to be University) will integrate the marks or grades achieved by the student, conveyed by the Host Institution through the PI of the SWAYAM course, into the student's official marks sheet. These marks contribute to the final award of the degree conferred by the University.

IV. Credit Mobility of Online Courses

The Yenepoya (Deemed to be) University will give the equivalent credit weightage to the students for the credits earned through online learning courses as per the credit plan of the program.

In case a student fails to complete the online course he/ she may be allowed to complete the course requirements by registering for another online course in a subsequent semester or opt for a course offered at this Yenepoya (Deemed to be University).

- The elective course offered by the Yenepoya(Deemed to be University) shall be restricted to a maximum of 3 credits.
- A candidate shall compulsorily complete a total of 6 Credits of Multidisciplinary courses.
- These courses shall be selected either from the Generic Electives offered by the Yenepoya (Deemed to be) university or from the SWAYAM/Coursera courses. A Candidate shall have the freedom to choose the courses of once own choice and learn at their own pace but be required to complete a minimum of 3 credits before the second semester, 6 credits before the fourth semester end examination.
- A candidate who is desirous to add more credits shall be permitted to do so during the academic duration. Extra credits earned by a candidate shall be included in the marks card on submission of the course completion certificate. However, it shall not be considered for awarding the Grade in the MPH programme.

V: Assigning Total Credits for PG Programme

The UGC, in its notification No.F.1-1/2015 (Sec.) dated 10/4/15 has provided a set of “Model curricula and syllabi for CBCS programmes. In conformation with this notification, at Yenepoya (Deemed to be University), for PG programmes, with duration of 2 years study period or 4 semesters, the total credits for MPH shall be 91 credits. Public Health practicum will be compulsory in all the semesters. Internship is compulsory to complete the course and total duration is six weeks (including weekly holidays) to be undertaken in any designated settings related to specializations opted by students. Internship would be of 8 credits.

VI. Coding System

The coding system shall be in consonance with the system followed by the office of the controller of examination. Presently the following coding pattern is followed.

- The first two letters describe the faculty name followed by level of programme (UG –01; PG–02) and two letters represent the programme.

- Course code shall have prefix denoting semester number followed by an alphabet of respective type of courses such as C = Core, OE = Open Elective, DSE: Discipline specific electives, P= Practical, ME=Multidisciplinary course followed by numbers denoting number of courses taught. Example: 1st SEMESTER: 1C1, 1C2, 1C3, 1ME1, 1SEC1 etc. 2nd SEMESTER: 2C1, 2C2, 2C3, 2ME1, 2SEC1, etc. 3rd SEMESTER: 3C1, 3C2, 3DSE1, 3DSE2,3SEC1etc. 4th SEMESTER: 4RP1, 4I1.

3. Programme Structure

Semester I									
Sl No.	**Course Code**	**Course Type**	**Course name**	**Hrs/wk**			**Max. Marks**		**Credits**
				L	**T**	**P**	**IA**	**SEE**	
1	AH02PH1C1	CC	Introduction to Public Health	3	-	-	50	50	3
2	AH02PH1C2	CC	Epidemiology	2	1	-	50	50	3
3	AH02PH1C3	CC	Biostatistics & Research Methods in Public Health	3	1	-	50	50	4
4	AH02PH1C4	CC	Bioethics	3	-	-	50	50	3
5	AH02PH1C5	CC	Social and Behaviour Science in Public Health	2	1	-	50	50	3
6	AH02PH1P1	SEC	Public Health Practicum	-	-	20	50	50	5
Total				**13**	**3**	**20**	**600**		**21**

Semester II									
Sl No.	Course Code	Course Type	Course name	Hrs/wk			Max. Marks		Credits
				L	T	P	IA	SEE	
1	AH02PH-2C1	CC	Demography	2	1	-	50	50	3
2	AH02PH-2C2	CC	Public HealthNutrition	2	1	-	50	50	3
3	AH02PH-2C3	CC	Health system management & program planning	3	-	-	50	50	3
4	AH02PH-2DSE1	DSE	Discipline Specific Elective- 1	2	1	-	50	50	3
5	AH02PH-2DSE2	DSE	Discipline Specific Elective- 2	2	1	-	50	50	3
6	AH02PH-2P1	SEC	Public Health Practicum	-	-	20	50	50	5
7	AH02PH-2ME1	OE	Self-learning course(SWAYAM/Coursera)		-	-	-	-	3
Total				**12**	**3**	**20**	**600**		**23**

Semester II		
Discipline Specific Elective (DSE) 1		
Code	**Specialization**	**Courses**
S1	Epidemiology	Epidemiology of major diseases
S2	Maternal and Child Health	Women's Health
S3	Disaster and Emergency Management	Introduction to disaster risk management & humanitarian response
S4	Emergency Management	Risk management in the emergency management context (16 points) through CSU

Semester II		
Discipline Specific Elective (DSE) 2		
Code	**Specialization**	**Courses**
S1	Epidemiology	Epidemiology of major diseases
S2	Maternal and Child Health	Developing Programs & Policies for women & children
S3	Disaster and Emergency Management	Institutional framework of disaster and humanitarian response
S4	Emergency Management	Elective subject (16 points)

** Students pursuing a specialization in Emergency Management from Charles Sturt University, Australia, must fulfil the core courses outlined in the Graduate Certificate in Emergency Management.

Semester-III									
Sl No.	**Course Code**	**Course Type**	**Course name**	**Hrs/wk**			**Max. Marks**		**Credits**
				L	**T**	**P**	**IA**	**SEE**	
1	AH03PH-3C1	CC	Health system research for evidence-based policy & practice in PH	2	1	-	50	50	3
2	AH03PH-3C2	CC	Infectious & chronic diseases	2	1	-	50	50	3
3	AH03PH-3C3	CC	Health education & health promotion	3	-	-	50	50	3
4	AH02PH-3DSE1	DSE	Discipline Specific Elective- 1	2	1	-	50	50	3
5	AH02PH-3DSE2	DSE	Discipline Specific Elective- 2	2	1	-	50	50	3
6	AH02PH-3ME1	OE	Self-learning courses (SWAYAM/MOOC)	-	-	-	-	-	3
7	AH02PH-3P1	SEC	Public Health Practicum		-	20	50	50	5
Total				**11**	**4**	**20**	**600**		**23**

Semester III		
Discipline Specific Elective (DSE) 1		
Code	**Specialization**	**Courses**
S1	Epidemiology	Health informatics, data science, and epidemiology
S2	Maternal and Child Health	Social & theoretical perspectives of Maternal Health
S3	Disaster and Emergency Management	Health in humanitarian emergencies
S4	Emergency Management	Contemporary practices in emergency management

Semester III		
Discipline Specific Elective (DSE) 2		
Code	**Specialization**	**Courses**
S1	Epidemiology	Analytical methods for epidemiology
S2	Maternal and Child Health	Reproductive, Maternal, Newborn, Child & Adolescent Health + Nutrition
S3	Disaster and Emergency Management	Working & Volunteering in humanitarian emergencies
S4	Emergency Management	Elective subject (16 points)

** Students pursuing a specialization in Emergency Management from Charles Sturt University, Australia, must fulfil the core courses outlined in the Graduate Certificate in Emergency Management.

Semester IV									
Sl No.	Type	Course code	Course name	Hrs/wk			Max Marks		Credits
				L	T	P	IA	SEE	
1	RP	AH02PH- 4RP1	Dissertation	-	-	-	100	100	12
2	SEC	AH02PH- 4I2	Internship/Block placement	-	-	24	100	100	12
Total							**400**		**24**

4. Attendance

Every candidate shall have attended at least 80 percent of the total number of theory and field visit/practical training classes conducted from the date of commencement of the term to the last working day as notified by the university in each of the subjects prescribed for that semester separately, in theory and field visit/practical training. Only such candidates are eligible to appear for the university examination in their first attempt. A candidate lacking the prescribed percentage of attendance in any subject either in theory or field visit/practical training in the first appearance will not be eligible to appear for the University Examination in that particular course. The Candidates with less than 80% of attendance shall be required to repeat that course by attending the semester and the University exam.

5. Syllabus / Course contents

FIRST SEMESTER

Sl No.	Type	Course code	Course name	Hrs/wk			Credits	Max. Marks		Total
				L	T	P		IA	SEE	
1	CC	AH02PH-1C1	Introduction to Public Health	3	-	-	3	50	50	100
2	CC	AH02PH-1C2	Epidemiology	2	1	-	3	50	50	100
3	CC	AH02PH-1C3	Biostatistics & Research methods in Public Health	3	1	-	4	50	50	100
4	CC	AH02PH-1C4	Bioethics	3	-	-	3	50	50	100
5	CC	AH02PH-1C5	Social & Behavioral science in Public Health	2	1	-	3	50	50	100
6	SEC	AH02PH-1P1	Public Health Practicum	-	-	20	5	50	50	100
Total				**13**	**3**	**20**	**21**	**300**	**300**	**600**

AH02PH-1C1- AH: Allied Health, **02**: Degree level (PG), PH: Programme (Public Health), **1C1**: Semester/Core course/Subject number, **SEC**: Skill Enhancement Course, **IA**-Internal Assessment, **SEE**– Semester End Examination, **Hrs/W**-Number of hours per week

INTRODUCTION TO PUBLIC HEALTH

Course type: Core

Course code: AH02PH-1C1

Credits: 3 Duration: 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To Understand the basic concepts of public health and its importance of health system in detail

CO2. To Have in depth knowledge of different understandings of the concepts of health, disease, and illness

CO3. To have thorough knowledge of public health determinants related to society, culture and environment.

CO4. To understand the role of international healthcare agencies & their roles.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	5	Basics of Public Health 1.1 Overview	✓			Didactic Lecture	15%	SE
		1.2 History &Evolution of Public health (PH)	✓					
		1.3 Public health as a system	✓					
		1.4 Features of public health	✓					
		1.5 Importance of public health	✓					
Unit II	10	Concept of health, illness, & diseases (health from ecological perspectives) 2.1 Ecology of health	✓			Didactic Lecture Group discussion	20%	LE, SE
		2.2 Determinants of health and disease	✓					
		2.3 Dimensions of health and disease	✓					
		2.4 Measure health-	✓					
		2.5 Indicators of health	✓					

Unit III	5	Measuring health and disease 3.1 Morbidity & Mortality	✓			Didactic Lecture Assignment	15%	SE
		3.2 Economic dimension		✓				
		3.3 Comparisons of health indicators of selected developed and developing countries and its various measures	✓					
Unit IV	5	Core function of PH practices 4.1 Relationship b/w public health & medical care system	✓			Didactic Lecture Seminar	15%	SE
		4.2 Role of public health in global society		✓				
		4.3 Impact of health disparities on public health	✓					
Unit V	10	Resources of PH & Disaster management 5.1 Infrastructure of PH	✓			Didactic Lecture Flipped classroom	15%	LE, SE
		5.2 Human resources in Public Health	✓					
		5.3 Organizations – resources	✓					
		5.4 Challenges in public health	✓					
		5.5 Definitions & concepts of disaster mang.	✓					
		5.6 Vulnerable populations in disasters	✓					
		5.7 Evaluation of disaster response & its implications for planning		✓				
		5.8 Disaster risk assessment						
Unit VI	10	Indian Public Health System & International health agencies 6.1 Public health hospital system		✓		Didactic Lecture Assignment	20%	LE, SE
		6.2 Primary care system	✓					
		6.3 Integration issues		✓				
		6.4 Health programs			✓			
		6.5 History of IH			✓			
		6.6 International health agencies-WHO, UNICEF, WORLD BANK.			✓			

➤ REFERENCE:

1. Gillam S, Yates J, Badrinath P, editors. Essential public health: theory and practice. 2ndedt. Cambridge: Cambridge Univ. Press; 2012. 332 p. (Cambridge medicine).
2. Blaxter M. Health. 2nd ed. Cambridge, UK; Malden, MA: Polity Press; 2010. 183 p. (Key concepts).
3. AH Suryakanta, Textbook of Community Medicine with recent advances, Jaypee publishers, 4thEdt. 2017
4. K Park, Textbook of preventive and social medicine, Banarsidas, Bhanot publishers 26th Edt.2021
5. Lal S, Adarsh P, Pankaj. Textbook of community medicine: Preventive and social medicine. CBS; Edt.2007.
6. J. Kishore, Textbook of National Health Programmes in India. Elsevier Publishers 14th. Edt.2022
7. David puncheon, Handbook of Public health Practice. Oxford handbook services: 9thEdt. 2006

EPIDEMIOLOGY

Course type: Core

Course code: AH02PH-1C2

Credits: 3 Duration: 45 hours

➤ COURSE OUTCOMES:

At the end of this course, students should be able to:

CO1. Learn the history, evolution, pioneers of epidemiology. Also understanding the basic concepts of health, disease, and levels of prevention.

CO2. Explain the principles of disease and causation with particular emphasis on modifiable environmental factors.

CO3. Understand the basic epidemiological measurements such as Incidence, prevalence, Odds ratio, and relative risks.

CO4. To know the various types of epidemiological study designs and, understand their basic principles and the main analytic methods used in each specific design.

CO5. Application of epidemiology to the prevention of disease and promotion of health.

CO6. Able to identify the bias/errors or confounders in different epidemiological studies.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	1.1 Introduction to Epidemiology	✓			Didactic lecture Group discussion, Practical Assignment	25%	LE, SE
		1.2 History & evolution	✓					
		1.3 Principles &uses of epidemiology	✓					
		1.4 Features of public health	✓					
		1.5 Concepts of health and disease, Epidemiological triad	✓					
		1.6 Natural history of disease	✓					
		1.7 Levels of prevention & Screening	✓					
Unit II	8	Basic measurements in epidemiology 2.1 Tools of measurements	✓			Didactic lecture Practical Assignment	10%	SE
		2.2 Measurements of disease frequency	✓					
Unit III	7	Risk factors 3.1 Relative risk	✓			Didactic lecture Practical Assignment	10%	SE
		3.2 Attributable risk	✓					
		3.3 Odds ratio	✓					
Unit IV	8	Association and Causation 4.1 Measures of Association	✓			Didactic lecture Group discussion, Seminar Presentation Practical/ Problem solving	15%	SE
		4.2 Koch's postulate	✓					
		4.3 Concept of causation and Hill's criteria	✓					
Unit V	7	5.1 Estimation of disease burden & Sources of epidemiological data - Factors associated with disease burden: DALY, QALY, YLL, YLD	✓			Didactic lecture Seminar presentation	15%	LE, SE
		5.2 Sources of epidemiological dataOverview - Census	✓					
		- Survey	✓					
		Civil Registration System (CRS)	✓					

Unit VI	8	Epidemiological study designs 6.1 Importance and Classification	✓			Didactic lecture Practical Assignment Seminar presentation	25%	LE, SE
		6.2 Cross sectional	✓					
		6.3 Case control	✓					
		6.4 Cohort study	✓					
		6.5 Ecological study	✓					
		6.6 Randomized & Non-randomized control trial & others study designs	✓					
		6.7 Bias, errors, and confounding	✓					
		6.9 Types of bias & errors in research	✓					
		6.1 Effect modification	✓					
		6.2 Difference between effect modification and confounder	✓					

REFERENCE:

1. Park K. Park's textbook of preventive and social medicine. Jabalpur. Banarasidas Bhanot. 2011.
2. Suryakantha AH. Textbook of community medicine with recent advances. India: Jaypee brother's medical publication, 2017.
3. MacMahon B and Tsioropoulos D. Epidemiology: Principles and Methods, 2nd ed. Little Brown and Company, Boston, 1996.
4. Celentano DD, Mhs S, Szklo M. Gordis. Epidemiología. Elsevier. 2019.
5. Rothman KJ. Epidemiology: an introduction. Oxford University Press, 2012.
6. Bonita R, Beaglehole R, Kjellström T. Basic epidemiology. World Health Organization, 2008.
7. Haddon W, Baker SP, Clark DW, MacMahon B. Preventive, and community medicine. 1981.

BIOSTATISTICS AND RESEARCH METHODS IN PUBLIC HEALTH

Course type: Core

Course code: AH02PH-1C3

Credits: 4 **Duration:** 60 hours

PART-I: BIOSTATISTICS

➤ **COURSE OUTCOMES:**

At the end of this course, students should be able to:

CO1. To understand the role of Biostatistics in the disciplines of Health Sciences

CO2. To appropriate summary measures and graphical tools for the data

CO3. To understand the concept of uncertainty in biological data and to know the importance of probability and probability distributions.

CO4. To acquire the skills of selecting suitable sampling technique for specific research design.

CO5. To know the importance and method of sample size determinations.

CO6. To restate the research hypothesis in terms of statistical hypothesis and to understand the principles of hypothesis testing.

CO7. To be able to distinguish between parametric and nonparametric tests.

CO8. To know about bivariate and multivariate data, Measures of relationship: correlation and regression. Interpret the results of correlation and regression analysis.

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	1.1 Introduction to Biostatistics	✓			Lectures Group discussion	10%	SE
		1.2 Statistics and Health Science Scope & limitations of Statistics	✓					
		1.3 Data types & sources	✓					
		1.4 Types of variables- continuous & discrete	✓					
		1.5 Fundamental scales of measurement- nominal, ordinal, ratio, and scale	✓					
Unit II	8	Measures of central tendency&dispersion 2.1 Measures of central tendency- Mean,median, mode, Partition values	✓			Lectures Group discussion Assignment	10%	SE
		2.2 Measures of dispersion- range, mean deviation, standard deviation, quartile deviation, Merits and demerits	✓					
		2.3 Coefficient of variation-application	✓					
		2.4 Graphs & diagrams for data presentation. Skewness and Kurtosis, Box plot	✓					
Unit III	7	Probability &Probability Distributions 3.1 Medical Uncertainties Probability	✓			Lectures Group discussion Assignment	10%	LE, SE
		3.5 Sensitivity, Specificity, Positive predictive value (PPV), Negative Predictive Value (NPV), ROC Curve	✓					
		3.5 Sensitivity, Specificity, Positive predictive value (PPV), Negative Predictive Value (NPV), ROC Curve	✓					
		3.6 Binomial distribution, Poisson distribution, Normal distribution	✓					

Unit IV	8	4.1 Theory of Sampling	✓			Didactic lectures Group discussion	10%	LE, SE
		4.2 Concept of population & sample	✓					
		4.3 Random sampling, Sampling, non-sampling errors	✓					
		4.4 Importance of Probability sampling	✓					
		4.5 Pilot study	✓					
		4.6 Methods of random sampling: Simple random sampling, stratified and systematic samplingmethods	✓					
		4.7 Sample size calculation	✓					
Unit V	7	Inferential Statistics 5.1 Estimation: Parameter & Statistic, point estimation and Interval estimation	✓			Didactic lectures Group discussion	10%	LE, SE
		5.2 Hypothesis testing: Concept of statistical hypothesis and research hypothesis, errors in decision making Type-I & Type II error, size and power of the statistical test, level of significance, p value & statistical significance. Statistical Vs Medical significance	✓					
		5.3 Parametric Tests: Hypothesis testing for continuous data- one & two sample t test, paired t test, z-test, One-way ANOVA. Multiple Comparison tests.	✓					
		5.4Nonparametric tests-need& scope, sign test, median test, Mann Whitney U test, Wilcoxon Signed rank test, Chi-square test of Independence of Attributes	✓					

Unit VI	8	Correlation & Regression 6.1 Correlation coefficient- for continuous data, assumptions, hypothesis about correlation coefficient, Confidence interval for correlation coefficient, rank correlation, intraclass correlation, correlation versus causation	✓			Lectures Group discussion Assignment	10%	SE
		6.2 Simple linear regression & Multiple linear regression. Estimation & testing, interpretation, prediction and application. Introduction to Logistic Regression						
Unit VII	7	Research Design in Health Research 7.1 Types of Study design: Descriptive & Analytical Studies, Prospective, Retrospective Studies, Cohort studies, Case-control studies. Advantages and Disadvantages	✓			Lectures Group discussion	10%	SE
		7.2 Concept of Relative Risk (RR) Odds Ratio (OR), Stratified Analysis for Confounding factors. Attributable Risk, Preventive Fraction	✓					
PART-II: RESEARCH METHODS IN PUBLIC HEALTH								
Unit I	4	An Introduction to Research in public health 1.1 Health System Research	✓			Didactic lectures Group discussion Quiz/ MCQs	10%	LE, SE
		1.2 Identifying research problem and shaping research questions	✓					
		1.3 Review of literature	✓					

Unit II	3	Operationalizing Research for Public Health 2.1 Research Designs& type of research designs	✓			Didactic lectures Group discussion Flipped classroom	5%	SE
		2.2 Methods and Tools	✓					
		2.3 Issues of Measurement and Assessment		✓				
		2.4 Mixed methods	✓					
		2.5 GIS mapping and other IT uses in health research			✓			
Unit III	5	Qualitative approaches and methods	✓			Didactic lectures Group discussion	10%	LE, SE
		3.1 Ethnography	✓					
		3.2 Phenomenology	✓					
		3.3 Grounded theory	✓					
		3.4 Case study analysis	✓					
		3.5 Narrative approaches	✓					
		3.6 Community based participatory research	✓					
		3.7 Interpretative, Constructivist and Critical analysis		✓				
		3.8Content analysis	✓					
		3.9 Discourse analysis	✓					
Unit IV	3	Developing research proposal 4.1 Developing conceptual & theoretical framework	✓			Didactic lectures Group discussion Hands on training	5%	SE
		4.2 Writing & presenting research		✓				
		4.3 Developing a research proposal	✓					

➤ REFERENCE:

Part I: Essential readings

1. Balavendra, Antonisamy Prasanna S. Premkumar, Solomon Christopher, Principles and Practices in Biostatistics. Elsevier ,2017

2. Jerrold H .Zar, Biostatistical Analysis. 5th Edition, Pearson, 2016.

3. ArunBadraKanhal, Mahajan's Methods in Biostatistics for Medical Students and Research Workers. 8th Ed. Jaypee Brothers Medical Publishers(P) Ltd., 2016.

4. Bernard Rosner, Fundamentals of Biostatistics. 8thEd. CENGAGE Learning; 2016

5. K VisveswaraRao, Biostatistics a Manual of Statistical Methods for Use in Health Nutrition and Anthropology. 2nd Edition, JAYPEE, 2009.

6. Wayne W Daniel, Biostatistics A Foundation for Analysis in the Health Sciences. 7th Ed. John Wiley& Sons; 2005

Part II: Essential readings

1. MacMahon B and Trichopoulos D. (1996). Epidemiology: Principles and Methods, 2nd ed., Little Brown and Company, Boston, Chapter 1.

2. John W. Ratcliffe and Amalia Gonzalexdel-Vaile (1988) Rigour in Health - Related Research: Towards an Expanded Conceptualisation, International Journal of Health Services Vol. 18, No.pp. 361-392.

3. Baum, Francis (1995). Researching public health: Behind the qualitative-quantitative methodological debate. Social Science and Medicine, Vol.40, No.4, pp.449-468

4. Gatrell Anthony C. &Loytonen, Markku (eds.) (1998): GIS and Health, Taylor and Francis, London

5. Bowling, Ann (2002) Research Methods in Health- Investigating Health and Health Services. Open University Press. Buckingham. Section II, Chapters 5& 6

Suggested readings

1. Majumdar P.K. (2005): Research Methods in Social Sciences, Viva Books, New Delhi. 3. Friedman, Daniel J, Edward l Hunter and R Gibson Parrish II (2005) Health StatisticsShaping Policy and Practice to Improve the Population's Health, Oxford University Press. Oxford.

2. Yukiko Asada. (2005). A framework for measuring health inequity. Journal of epidemiology and community health vol. 59, pp. 700-705.

BIOETHICS

Course type: Core

Course code: AH02PH-1C4

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of this course, students should be able to:

CO1. Locate the importance of bioethics in health care and research.

CO2. Understand the ethical principles and theories.

CO3. Identify ethical issues in healthcare setting and their possible solutions.

CO4. Analyze the ethical issues in specific clinical settings.

CO5. Apply ethical principles in clinical research.

CO6. Locate the importance of healthcare provider- patient relationship.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	9	Introduction to bioethics 1.1 Definition and scope of bioethics	✓			Didactic lecture Assignment	20%	SE
		1.2 History of bioethics	✓					
		1.3 Codes of ethics	✓					
Unit II	9	Ethical principles and theories 2.1 The ethical principles	✓			Didactic lecture Assignment	20%	SE
		2.2 Ethical theories 2.3 Application of ethical theories and principles in healthcare	✓					

Unit III	9	Ethics in healthcare 3.1 Consent	✓			Didactic lecture Assignment	20%	LE, SE
		3.2 Risk: benefit analysis	✓					
		3.3 Distributive justice	✓					
		3.4 Privacy & confidentiality	✓					
		3.5 Stigma and discrimination	✓					
		3.6 Health technology assessment 3.7 Public health ethics	✓					
Unit IV	9	Specific ethical issues in healthcare 4.1 End of life care and euthanasia	✓			Didactic lecture Assignment	20%	LE, SE
		4.2 Artificial reproductive techniques	✓					
		4.3 Medical termination of pregnancy	✓					
		4.4 Pre-natal sex determination	✓					
		4.5 Organ donation	✓					
		4.6 Medical errors and truth telling	✓					
		3.6 Health technology assessment 3.7 Public health ethics	✓					
Unit V	9	Research ethics 5.1 Research ethics principles	✓			Didactic lecture Assignment	20%	LE, SE
		5.2 Informed consent	✓					
		5.3 Vulnerability in research	✓					
		5.4 Responsible conduct of research	✓					
		5.5 Publication ethics	✓					

➤ REFERENCE:

1. English DC. Bioethics a Clinical Guide for Medical Students.
2. Tayaoe M.C. Textbook of Medical Bioethics, Attitude and Communication for Medical Students; 2016 Feb 28.
3. Princy Louis Palatty. A Textbook of Bioethics for Healthcare Professionals 1st Edition; 2018

SOCIAL AND BEHAVIORAL SCIENCE IN PUBLIC HEALTH

Course type: Core

Course code: AH02PH-1C5

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

CO1. To get the concept of Behavioral dimensions involved in Public Health

CO2. The evolution of social behavior as a discipline in Public Health.

CO3. To understand the critical concepts in Social and Behavioral science

CO4. To get familiarized with theories applied in social behavior and its implications on Public Health

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	10	1.1 Introduction to Social Behavioral Health	✓			Didactic lecture Group discussion	10%	SE
		1.2 The concept of Social and Behavioral Science of Health	✓					
		1.3 Social & Behavioral causations of diseases in community	✓					
		1.4 Evolution of Social Behavioral science in PH						
		1.5 Shift from Infectious to Chronic Disease		✓				
		1.6 Levels of Prevention			✓			
		1.7 Role of Social & Behavioral science in PH						

Unit II	8	Key Concepts in Social Science Behavior 2.1 Population Dynamics		✓		Didactic lecture Group discussion	10%	SE
		2.2 Demography and its indicators		✓				
		2.3 Demographic, Development, and epidemiological Transition			✓			
		2.4 Social Epidemiology		✓				
		2.5 Causal continuum	✓					
		2.6 Knowledge & Attitude	✓					
		2.7 Culture	✓					
		2.8 Social environment	✓					
		2.9 Ethno medicine and western medicine		✓				
Unit III	13	Social Science Behavior Theories & Health Behavior 3.1 Socio Ecological Framework to explain the contextual factors	✓			Didactic lecture Seminar Group discussion	20%	LE, SE
		3.2 Classification of theories: Individual/Social/Health behavior level	✓					
		3.3 Health Behavior Overview		✓				
		3.4 Health behavior and illness behavior		✓				
		3.5 Disease management behavior	✓					
		3.6 Sick role			✓			
Unit IV	4	Social and Environment reaction & Community based intervention 4.1 Social Environment and Health	✓			Didactic lecture Group discussion Quiz /MCQs	10%	SE
		4.2 Social Reaction to diseases	✓					
		4.3 Deviance behavior/social control	✓					
		4.4 Social Marketing in Public Health	✓					
		4.5 Steps in social marketing	✓					
		4.6 Policy and advocacy	✓					

Unit V	5	5.1 Cultural Competence and innovation	✓			Didactic lecture Group discussion	10%	LE, SE
		5.2 Health Diversity 5.3 Health Disparity	✓ ✓					
		5.4 Cultural Competence	✓					
		5.5 Theoretical perspective	✓					
		Society & Social pathology 6.1 Overview and types of society		✓				
Unit VI	5	Society & Social pathology 6.1 Overview and types of society	✓			Didactic lecture	10%	LE, SE
		6.2 Social Institutions	✓					
		6.3 Social Mobility	✓					
		6.4 Social Change	✓					
		6.5 Social pathology - Overview and concept		✓				
		6.6Crime/Slums/Delinquency/alcoholism /Beggary		✓				

➤ REFERENCE:

1. Jeannine C, Carol BJ & Neil H., Social and Behavioural Foundation of Public Health,2nd Ed., Sage; 2001.
2. Mark E. Essentials of health behavior. 3rd Ed., Jones and Bartlett Publishers; 2019.
3. Foster GM & Anderson BG. Medical Anthropology, New York, Wiley; 1978.

PUBLIC HEALTH PRACTICUM

Course type: SEC

Course code: AH02PH-1P1

Credits: 5 **Duration:** 20 hours/week

COURSE OUTCOMES:

At the end of the course students will be able to understand:

CO1. Community / Field / industry visits are the actual learning place for a student of Public Health. During these visits students will get real-time experience of classroom teachings & will get an opportunity of hands-on experience.

CO2. Public health principles, methodologies, & interventions through direct observation, interaction with professionals and engagement with local communities.

CO3. Witness how public health concepts and strategies are implemented in various settings, such as health care facilities, community programs or public health agencies/ organizations.

CO4. Effectiveness and impact of different interventions, programs or policies. Also to analyze the strengths, weakness and challenges faced in delivering public health services and identify potential areas for improvement.

CO5. To work in interdisciplinary teams, understand the roles and perspectives of different stakeholders and appreciate the importance of collaboration for effective public health practice.

CO6. To enhance their communication skills by engaging in discussion, interviews also can develop advocacy skills by learning to effectively convey public health messages and promote positive health behaviors.

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage
Unit I	-	1.1 Understanding Health care system/Public health system in India	✓			Field visit Checklist Reflection writing	25%
		1.2 Sub-centers & AWC Primary Health centre CHC/RHTC/UHTC District hospital/offices/ laboratories	✓				

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage
Unit I	-	1.1 Understanding Health care system/Public health system in India	✓			Field visit Checklist Reflection writing	25%
		1.2 Sub-centers & AWC Primary Health centre CHC/RHTC/UHTC District hospital/offices/ laboratories	✓				
Unit II	-	Community health needs assessment 2.1 Identify the area	✓			Field visit Checklist Reflection writing	25%
		2.2 Conduct the need assessment	✓				
		2.3 Collect data (Survey/Questionnaire/FGD etc) Develop a community action plan	✓				
Unit III	-	3.1 Application of Epidemiological methods	✓			Field visit Checklist Reflection writing	25%
		3.2 Application of Epidemiological triad	✓				
		3.4 Levels of prevention	✓				
		3.5 Screening	✓				
		3.6 Outbreak investigation	✓				
Unit IV	-	Hands on training on computer skills 4.1 Microsoft office: - Word document - Excel - Power point presentation etc - SPSS - STATA	✓			Hands on training	25%

Sl No.	Type	Course code	Course name	Hrs/wk			Credits	Max. Marks		Total
				L	T	P		IA	SEE	
1	CC	AH02PH-2C1	Demography	2	1	-	3	50	50	100
2	CC	AH02PH-2C2	Public Health Nutrition	2	1	-	3	50	50	100
3	CC	AH02PH-2C3	Health system management & program planning	3	-	-	3	50	50	100
4	DSE	AH02PH-2DSE1	Discipline Specific Elective-1	2	1	-	3	50	50	100
5	DSE	AH02PH-2DSE2	Discipline Specific Elective-2	2	1	-	3	50	50	100
6	SEC	AH02PH-2P1	Public Health Practicum	-	-	20	5	50	50	100
7	OE	AH02PH-2ME1	Self-learning course (SWAYAM/ MOOC)	-	-	-	3	-	-	-
Total				12	3	20	23	**300**	**300**	**600**

AH02PH-1C1- AH: Allied Health, **02**: Degree level (PG), **PH**: Programme (Public Health), 1C1: Semester/Core course/Subject number, **SEC**: Skill Enhancement Course, **ME**: Multidisciplinary elective course, **OE**: Open elective, **IA**-Internal Assessment, **SEE**– Semester End Examination, **Hrs/W**-Number of hours per week

Semester II		
Discipline Specific Elective (DSE) 1		
Code	**Specialization**	**Courses**
S1	Epidemiology	Epidemiology of major diseases
S2	Maternal and Child Health	Epidemiology of major diseases
S3	Disaster and Emergency Management	Introduction to disaster risk management & humanitarian response
S4	Emergency Management	Risk management in the emergency management context (16 points) through CSU

Semester II		
Discipline Specific Elective (DSE) 2		
Code	**Specialization**	**Courses**
S1	Epidemiology	Epidemiological research
S2	Maternal and Child Health	Developing Programs & Policies for women & children
S3	Disaster and Emergency Management	Institutional framework of disaster and humanitarian response
S4	Emergency Management	Elective subject (16 points)

** Students pursuing a specialization in Emergency Management from Charles Sturt University, Australia, must fulfil the core courses outlined in the Graduate Certificate in Emergency Management.

DEMOGRAPHY

Course type: Core

Course code: AH02PH-2C1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course students will be able to:

CO1. Understand the basic concepts, techniques and various sources in population sciences.

CO2. Gain a comprehensive understanding of the key concepts and terminologies used in demography such as, Population size, growth rate, fertility, mortality, migration and demographic transition.

CO3. Study the population composition and explore demographic methods.

CO4. Learn how to calculate and interpret vital rates and understand how these vital data contribute to changes in population size and structure over time.

➤ COURSE OUTCOMES:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question

Unit I	7	1.1 Demography and its relation to community health	✓			Didactic lecture Group discussion Flipped classroom Assignment	25%	LE, SE
		1.2 Overview -Nature, scope and Importance	✓					
		1.3 Its relation to community health	✓					
		1.4 Demography & population studies	✓					
		1.5 Sources of Demographic data – Overview, Importance & Uses	✓					
		1. 6 Various sources of demographic data: - Population census - Vital statistics - NSSO - NFHS,DLHS, AHS	✓					
		1.7 Development of demographic research in India	✓					
		1.8 Overview on demographic research	✓					
		1.9 Importance and its relevance to public health intervention	✓					
Unit II	8	Stages of demographic cycle and its impact on population 2.1 Overview	✓			Didactic lecture Group discussion Assignment	25%	SE
		2.2 Demographic cycle	✓					
		2.3 Demographic transition	✓					
		2.4 Demographic dividend	✓					
Unit III	7	Measurements of vital events in demography 3.1 Overview on vital events	✓			Didactic lecture Group discussion Assignment	25%	SE
		3.2 Rates, Ratio & proportion	✓					
		3.3 Midyear population etc						
		3.4 Life table concepts and its relation to PH	✓	✓				
		3.5 Importance and uses of life table concept						
		3.6 Migration and its impact						

Unit IV	8	Population dynamics, Demographic processes and population Theories 4.1 Marriages	✓			Didactic lecture Seminar presentation	15%	LE, SE
		4.2 Measures of fertility	✓					
		4.3 Measures of morbidity	✓					
		4.4 Measures of Mortality	✓					
		4.5 Population theories – Overview	✓					
		4.6 Population theories - Malthusian theory - Optimum theory of population - Theory of demographic transition	✓					
Unit V	7	Population composition 5.1 Age & sex composition (population pyramid)	✓			Didactic lecture Seminar presentation	15%	LE, SE
		5.2 Literacy level	✓					
		5.3 Occupational composition	✓					
		5.4 Socio-economic status	✓					
		5.5 Housing and family size	✓					
Unit VI	8	Population growth & Population Policy 6.1 Phases of population growth	✓			Didactic lecture Assignment Seminar presentation	10%	LE, SE
		6.2 Population explosion and population stabilization	✓					
		6.3 National population policy - Overview	✓					
		6.4 One child policy and two child policy	✓					
		6.5 Need for population control measures consequences and role of immigration	✓					

REFERENCE:

1. Census and Sample Registration System (SRS), Office of Registrar, GOI Available at: https://censusindia.gov.in/census.website/data/SRSMMB.
2. Lal S, Adarsh P, Pankaj. Textbook of community medicine: Preventive and social medicine. CBS; 2007.

3. Suryakantha AH. Textbook of community medicine with recent advances. India: Jaypeebrother's medical publication. 2017.
4. Park K. Park's textbook of preventive and social medicine. Jabalpur. Banarasidas Bhanot, 2011.
5. All reports and documents related to National Programmes from the Ministry of Health and Family Welfare- Government of India. Available at: https://main.mohfw.gov.in/documents/reports.
6. Asha Bhende and Tara Kanitkar. Principles of population Studies, Himalaya Pub Houses.2011.

PUBLIC HEALTH NUTRITION

Course type: Core

Course code: AH02PH-2C2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course students will be able to:

CO1. Understand the fundamental principles of public health nutrition and its significance in promoting health, development, and productivity.

CO2. Analyze the prevalence, causes, and consequences of malnutrition, under-nutrition, and over-nutrition globally, and evaluate the impact on public health.

CO3. Acquire knowledge and skills in nutritional assessment methods, including the use of indices and indicators, to evaluate the nutritional status of populations.

CO4. Examine nutrition requirements during different stages of life, such as infancy, childhood, adolescence, adulthood, pregnancy, and lactation, and understand the implications for public health nutrition interventions.

CO5. Explore the basics of nutritional epidemiology, including the distribution and determinants of malnutrition, and gain proficiency in research methods for studying nutritional issues and interventions.

CO6. Evaluate the strategies for nutritional deficiencies and common ailments, including both macro and micronutrient deficiencies, and develop community-based and facility-based approaches for addressing malnutrition.

CO7. Understand the importance of food security for nutrition and recognize the significance of food safety and standards in public health nutrition.

CO8. Examine the role of nutrition-related health policies and programs in addressing public health nutrition issues and understand the roles of government and private entities in promoting and implementing effective interventions.

➤ COURSE OUTCOMES:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	8	Introduction to public health nutrition 1.1 Public health nutrition - Relation b/w health, nutrition, development, and productivity – Principles of Public Health Nutrition	✓			Didactic lecture Group discussion	10%	SE
		1.2 Introduction to public health nutritional issues and programmes - Prevalence and causes of malnutrition, under nutrition &over-nutrition around the world	✓					
Unit II	8	Assessment of nutritional status and nutritional surveillance 2.1 Nutritional Assessment Systems & Indices/Indicators	✓			Didactic lecture Presentation Written assignment	20%	LE, SE
		2.2 Nutritional Assessment methods		✓				
		2.3 Nutrition surveillance and Screening - Principles, methods & applications	✓					
		2.4 Lifecycle & nutrition - Nutrition during Infancy, childhood, Adolescence & old age, nutrition during adulthood, Pregnancy and Lactation	✓					

Unit III	8	Nutritional epidemiology 3.1 Basics of nutritional epidemiology	✓			Lectures Group discussion	20%	LE, SE
		3.2 Distribution & determinants of Malnutrition - Present global and Indian scenario of malnutrition	✓					
		3.3 Causes of malnutrition: Social determinants	✓					
		3.4 Measures to combat malnutrition		✓				
		3.5 Studying of Malnutrition			✓			
Unit IV	8	Nutritional Management in Nutritional Deficiencies and Common Ailments 4.1 Nutritional Deficiency Diseases - Micro and macro nutrient deficiencies - Nutritional anaemia - Vit.A, Vit.D deficiency & IDD	✓			Lectures Article/Book Review	25%	LE, SE
		4.2 Prevention and management of NCD/other disease condition	✓					
		4.3 Prevention & management of lifestyle diseases		✓				
Unit V	7	Nutrition and food security 5.1 Food&nutrition	✓			Lectures Article/Book Review	25%	LE, SE
		5.2 Nutritional values of common food and food fortification	✓					
		5.3 Types of cooking & its effect on nutritional values of food	✓					
		5.4 Food& nutrition security/insecurity	✓					
		5.5 Factors influencing food & nutrition security	✓					
		5.6 Major contributor to national level malnutrition/under nutrition		✓				
		5.7 Food& nutrition security at local, national, and global			✓			

Unit VI	7	Food safety standards & Nutrition related health policies & Programmes 6.1 Food borne diseases	✓	✓		Lecture Proposal preparation	10%	SE
		6.2 Contamination and adulteration	✓					
		6.3 Food safety: Importance, issues and surveillance system	✓					
		6.4 National and international standards of food safety	✓					
		6.5 Nutrition related health policies and programmes	✓					
		6.6 Role of government and private entities		✓				

REFERENCE:

Essential Readings

1. Bhanot, Jabalpur Jelliffe DB: The assessment of nutrition status of the community WHO
2. Waterlow, J. (1997). Protein-energy malnutrition: The nature and extent of the problem. Clinical Nutrition, 16, 3-9. https://doi.org/10.1016/S0261-5614(97)80043-X
3. ICMR (2011) DIETARY GUIDELINES FOR INDIANS -A Manual NATIONAL INSTITUTE OF NUTRITION Hyderabad – 500 007, INDIA
4. Thompson J, Manore M, Vaughan L. The Science of Nutrition. 4th ed. Benjamin Cummings, 2017.
5. Gibson RS. Principles of Nutritional Assessment. 2nd ed. Oxford University Press, 2005.
6. World Health Organization. Physical Status: The Use and Interpretation of Anthropometry. WHO, 1995.

Suggested readings

1. Park K: Park's textbook of preventive and social medicine, M/s Banarasidas Shah P.M.: Early detection and prevention of protein caloric malnutrition.
2. Black AE, Cole TJ. Biased over- or under-reporting is characteristic of individuals whether over time or by different assessment methods. J Am Diet Assoc. 2001;101(1):70-80.
3. World Health Organization. Iron Deficiency Anaemia: Assessment, Prevention, and Control. WHO, 2001.

4. Victora CG, Horta BL, Loret de Mola C, et al. Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. Lancet Glob Health. 2015;3(4):e199-e205.
5. FAO/WHO. Guidelines on Food Fortification with Micronutrients. WHO, 2006.
6. Ruel MT. Operationalizing Dietary Diversity: A Review of Measurement Issues and Research Priorities. J Nutr. 2003;133(11 Suppl 2):3911S-3926S.
7. Brown JE, Isaacs JS, Krinke UB. Nutrition Through the Life Cycle. 6th ed. Cengage Learning, 2016.

HEALTHCARE SYSTEM, PROGRAMME PLANNING & MANAGEMENT

Course type: Core

Course code: AH02PH-2C3

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course students will be able to:

CO1. Get introduced to the health system.
CO2. The theoretical and philosophical perspective of the public health system of India.
CO3. Understand the organization of PHS at different levels.
CO4. Understand differenthealth systems of the world.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	10	Introduction to health system 1.1 Overview	✓			Didactic lecture	10%	SE
		1.2 Theoretical aspect Evolution of Public Health System			✓			
		Critical gaps in Public Health System		✓				

Unit II	10	Health care system in India 2.1 Philosophy behind PHS of India			✓	Didactic lecture	20%	LE, SE
		2.2 Components & Functions of PHCS- Primary, Secondary and Tertiary	✓					
		2.3 Private Health care system: 2.4 Formal & informal Health care systems of different states, Org'sand institutions of India	✓					
Unit III	10	Organizational structure at different levels 3.1 Planning at Central, State, District, Block and Village	✓			Didactic lecture Group discussion Field visit	20%	LE, SE
		3.2 Union Ministry of Health & Family Welfare	✓					
		3.3 Directorate General of Health Services	✓					
		3.4 Central Council of Health	✓					
		3.5 State Ministry of Health, State Health	✓					
Unit IV	5	Different types of health systems existing in the world	✓			Didactic lecture Flipped classroom Seminar	15%	SE
		4.1 Developed countries	✓					
		4.2 Developing countries	✓					
		4.3 Underdeveloped countries	✓					
Unit V	5	5.1 Health program planning	✓			Didactic lecture Seminar	20%	LE, SE
		5.2 Concept planning	✓					
		5.3 Planning process, structure, and functions	✓					
		5.4 Planning cycle						
		5.5 Epidemiological, political, & economic base for planning						
		5.6 Planning tools- PERT, CPM GANTT						
		5.6 Health planning models: POSDCORB, PREECED-PROCEED						

Unit VI	5	6.1 Healthcare management		✓		Didactic lecture Article review Group discussion	15%	SE
		6.2 Principles of management	✓					
		6.3 Components of management	✓					
		6.4 Management theories & techniques: Henri Fayol, F.W Taylor, Max Weber	✓					
		6.5 Leadership & Management Strategic planning and operational management	✓					
		6.6 Proposal development and fund raising	✓					
		6.7 Evaluation of project	✓					
		6.8 Health financing (Cost, Budget, Financial analysis)	✓					

➤ REFERENCE:

1. Sarantakos: Social research, Mac Millan press, Harupshire, Australia.1998
2. Festinger & Katz: Social research, Longman, London.1953
3. Jahoda Maric et al: Research methods in social relations, free press, New York. 1951.
4. Kothari, C.R: Research methodology, New age international publishers, Bombay. 2019
5. Park K. Park's text book of preventive and social medicine, M/s Banarasidas Bhanot, Jabalpur.2021

HEALTHCARE SYSTEM, PROGRAMME PLANNING & MANAGEMENT

Course type: DSE

Course code: AH02PH-2DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Understand the overview of the major diseases that are leading cause of death and disability globally.

CO2. Describe the epidemiological characteristics and relative impact of major diseases, both nationally and internationally.

CO3. Explain approaches to its risk factors and various approaches for prevention from public health perspectives.

CO4. Study the epidemiological aspects of major diseases and its national importance.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Basic epidemiology (Revision) & Introduction to epidemiology of major diseases 1.1 Overview on major diseases	✓		✓	Didactic lecture Group discussion Assignment Seminar presentation	10%	SE
		1.1 Epidemiological transition and Global burden of major disease		✓				
		1.3 Understand the Individual approaches/or high risk approaches and population based/or public health approaches to prevent major diseases						
		1.4 Comprehend the pop. based/PH approaches to prevent risk factors of major diseases						
		1.5 Introduction to epidemiological aspects of diseases: Mental health, Obesity, CVD, Cancer, Stroke, Hypertension, Diabetes, Burns/ trauma/accidents						

Unit II	8	Global epidemiology of Mental Health 2.1 Overview	✓			Didactic lecture Assignment Case study Field visit	15%	LE, SE
		2.2 Importance and Types of mental health disorders	✓					
		2.3 High risk groups	✓					
		2.4 Disease burden	✓					
		2.5 Risk factors	✓					
		2.6 Preventive measuresNational Health Programme	✓					
Unit III	8	Global epidemiology of Obesity & Hypertension 3.1 Overview, Classification based on BMI, High risk group, Disease burden, Risk factors, Preventive measures Classification (JNC-VIII), High risk groups, Disease burden, Risk factors, Preventive measures National Health Programme for Obesity & Hypertension	✓			Didactic lecture Group discussion Article review	15%	LE, SE
Unit IV	3	Global epidemiology of cardiovascular diseases & Stroke 4.1 Classification	✓			Didactic lecture Group discussion Article review	15%	LE, SE
		4.2 High risk groups	✓					
		4.3 Disease burden	✓					
		4.4 Risk factors	✓					
		4.5 Preventive measures	✓					
		4.6 National Health Programme	✓					
Unit IV	3	Global epidemiology of cardiovascular diseases & Stroke 4.1 Classification	✓			Didactic lecture Group discussion Article review	15%	LE, SE
		4.2 High risk groups	✓					
		4.3 Disease burden	✓					
		4.4 Risk factors	✓					
		4.5 Preventive measures	✓					
		4.6 National Health Programme	✓					

Unit V	4	Global epidemiology of Cancer 5.1 Types	✓			Didactic lecture Seminar presentation Case study/JC presentation	15%	SE
		5.2 High risk groups	✓					
		5.3 Disease burden	✓					
		5.4 Risk factors	✓					
		5.5 Preventive measures	✓					
		5.6 National Health Programme	✓					
Unit VI	8	Global epidemiology of Diabetes 6.1 Classification	✓			Didactic lecture Assignment Seminar presentation	15%	LE,SE
		6.2 High risk groups	✓					
		6.3 Disease burden	✓					
		6.4 Risk factors	✓					
		6.5 Preventive measures	✓					
		6.6 National Health Programme	✓					
Unit VII	7	Burns/trauma/ accidents 7.1 Overview	✓			Didactic lecture Assignment Seminar presentation	15%	LE,SE
		7.2 Preventive measures	✓					
		7.3 National Health Programme	✓					

REFERENCE:

1. J.Kishore. Textbook of National Health Programmes in India.Century publisher; 5thedt. 2011
2. Suryakantha AH. Text book of community medicine with recent advances. India: Jaypee Brother's medical publication. 2017.
3. Park K. Park's textbook of preventive and social medicine. Jabalpur. Banarasidas Bhanot.2011.
4. Lal S, Adarsh P, Pankaj. Textbook of community medicine: Preventive and social medicine. CBS; 2007.

EPIDEMIOLOGICAL RESEARCH

Course type: DSE

Course code: AH02PH-2DSE2

Credits: 3 **Duration:** 45 hours

COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Introduce the basic concept and scope of Epidemiological research Studies and its classification.

CO2. Provide fundamental skills needed to interpret of analytical concepts that would enable them to interpret results.

CO3. Understand the methods of research design clearly it will help them to learn in application.

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	6	Introduction to epidemiology 1.1 Definition, Scope of epidemiology	✓			Didactic lecture Group discussion Assignment Seminar presentation	10%	SE
		1.2 Basics concepts of epidemiology	✓					
		1.3 Types of epidemiological studies	✓					
		1.4 Study designs & their strengths and weakness	✓					
Unit II	7	Sources of epidemiological data 2.1 Vital statistics	✓			Didactic lecture Assignment Case study Field visit	15%	LE, SE
		2.2 Health survey	✓					
		2.3 Medical records	✓					
Unit III	10	Sampling, sampling designs and Data Collection Methods 3.1 Types of Sampling	✓			Didactic lecture Group discussion	15%	LE, SE
		3.2 Sampling Methods	✓					
		3.3 Sample size determination	✓					
		3.4 Methods to reduce sampling bias	✓					
		3.5 Secondary data sources	✓					
		3.6 Questionnaire	✓					
		3.7 Interviewing technique						

Unit IV	8	Data Management and analysis 4.1 Data entry and cleaning	✓			Didactic lecture Group discussion Seminar Presentation Case study	20%	LE, SE
		4.2 Descriptive statistics (Measures of central tendency)	✓					
		4.3 Inferential statistics (Hypothesis testing)	✓					
		4.4 Regression analysis	✓					
		4.5 Correlation analysis	✓					
Unit V	6	Ethical Consideration in Epidemiological findings 5.1 Principles of research ethics	✓			Didactic lecture Seminar presentation Case study/JC presentation	15%	LE, SE
		5.2 Informed Consent	✓					
		5.3 Confidentiality and privacy	✓					
		5.4 Protection of vulnerable populations	✓					
Unit VI	8	Communicating Epidemiological findings & Epidemiological applications 6.1 Types of epidemiological reports (descriptive, analytic)	✓			Didactic lecture Assignment Seminar presentation	15%	LE, SE
		6.2 Dissemination of research findings	✓					
		6.1 Outbreak investigations	✓					
		6.2 Screening programs	✓					

REFERENCE:

1. Park K. Park's textbook of preventive and social medicine. Jabalpur. Banarasidas Bhanot. 2011.
2. Suryakantha AH. Text book of community medicine with recent advances. India: Jaypee brother's medical publication. 2017.
3. Celentano DD, Mhs S, Szklo M. Gordis. Epidemiología. Elsevier; 2019.
4. Rothman KJ. Epidemiology: an introduction. Oxford university press; 2012.
5. Bonita R, Beaglehole R, Kjellström T. Basic epidemiology. World Health Organization; 2008.
6. Haddon W, Baker SP, Clark DW, MacMahon B. Preventive and community medicine.

MATERNAL AND CHILD HEALTH (S2)
WOMEN'S HEALTH

Course type: DSE

Course code: AH02PH-2DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To introduce the importance of reproductive health and its explanation
CO2. To identify the various factors impinging upon women's health
CO3. To provide analytical understanding of women's health problems

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Introduction to women's Health 1.1 Definition of women's health and its importance	✓			Didactic lecture	10%	SE
		1.2 Women's health priorities		✓				
		1.3 Historical perspectives on women's health		✓				
Unit II	8	Reproductive Health 2.1 Anatomy and physiology of the female reproductive system	✓	✓		Didactic lecture	10%	SE
		2.2 Menstrual cycle and menstrual disorders - Contraception and family planning - Pregnancy &Childbirth - Abortionand post abortion care - Reproductive health technologies – Infertility, Surrogacy, ART technique - IVF, IUI, GIFT and ZIFT	✓					

Unit III	7	Maternal and Child Health 3.1Maternal morbidity and mortality	✓			Didactic lecture	10%	SE
		3.2 Infant morbidity and mortality	✓					
		3.3 Perinatal and neonatal morbidity	✓					
		3.4 Breastfeeding and infant feeding practices	✓					
		3.5 Childhood immunizations and preventive care	✓					
		3.6 Child abuse & neglect		✓				
Unit IV	8	Women's mental Health 4.1 Common mental health disorders among women Eg: Depression, Anxiety, PTSD, Eating disorders, Substance abuse and addiction		✓		Didactic lecture	10%	SE
Unit V	8	Women's health &Ageing 5.1 Menarche and Menopause associated problems and its management	✓			Didactic lecture	15%	SE
		5.2 Menopause &hormone replacement therapy		✓				
		5.3 Chronic conditions that affecting women in midlife and beyond	✓					
		5.4 Bone health		✓				
		5.5 Programs related to geriatrics	✓					
Unit VI	7	Women's health policies and programs and global health issues 6.1 Women's health policies in India	✓			Didactic lecture	25%	LE, SE
		6.2 Evolution of MCH & family welfare programme services under RCH package RCH 1&RCH 2	✓					
		6.3 Current trends and status of family in India		✓				

		6.3 Current trends and status of family in India		✓				
		6.4 Maternity benefit schemes, PNDT act, MTP act, School health programs (ICDS)		✓				
		6.5 SDG in the development goals in the context of women & child health	✓					
		6.1 Global reproductive health issues Eg: Domestic violence, Sexual abuse		✓				

➤ REFERENCE:

1. K Park Textbook of preventive and social medicine, Jaypee brothers Publishers 26thedt 2021
2. J. Kishore Textbook of National Health Programmes in India, Century publishers. 10thedt.
3. D.C. Dutta Textbook of Gynaecology. Jaypee brothers Publishers 10thedt. 2012
4. Ross and Wilson, Textbook of Anatomy and Physiology Elsevier publications. 14th edt.

DEVELOPING PROGRAMMES & POLICIES RELATED TO WOMEN AND CHILDREN

Course type: DSE

Course code: AH02PH-2DSE2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To impart an understanding of the scope of women and child health and to enable students to find and interpret relevant information on women and child health.

CO2. Develop an acquaintance with the MCH Program.

CO3. Perform an evaluation of the programmatic activities in their area.

CO4. Understand the basic steps in the policy proposal

CO5. Understand the key health programmes, policies, and schemes available for women and children in India.

CO6. Identify the family welfare concepts, principles, and role of health workers/administrators in the implementation of programs

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Introduction to MCH 1.1 Health status of women in General & Reproductive health		✓		Didactic lecture	10%	SE
		1.2 Importance of Maternal & Child health	✓					
		1.3 Determinants of MCH		✓				
		1.4 Indicators of MCH care		✓				
		1.5 Different NHP and policies related MCH	✓					
Unit II	8	Health programs and policy: process and planning 2.1 Concepts underlying the design of health programs		✓		Didactic lecture Group discussion	20%	LE, SE
		2.2 Basic approaches to the design in NHP	✓					
		2.3 Policy making key components. Policy framework for MCH Stakeholders in policy making Translating research in policy making	✓					
Unit III	7	National Health Mission (NHM) 3.1 Introduction to NHM		✓		Didactic lecture Seminar presentation	15%	SE
		3.2 National Rural Health Mission (NRHM)	✓					
		3.3 National Urban Health Mission (NUHM)	✓					

Unit IV	8	4.1 Key health programs and policies in India			✓	Didactic lecture Seminar Assignment Discussion with expert in the field	15%	SE
		4.2 Reproductive and child health Child survival and safe motherhood Integrated Child Development Scheme (ICDS)			✓			
		4.3 Water supply and sanitation program		✓				
		4.4 Janani Shishu Suraksha Karyakram (JSSK)		✓				
		4.5 Rashtriya Bal SwasthyaKaryakram (RBSK)	✓					
		4.6 Maternity benefit schemes	✓					
		4.7 Integrated Management of Neonatal and Childhood Illness (IMNCI)	✓					
		4.8 Universal Immunization Program (UIP) - Basic Concept, 4.9 Objectives of UIP, Services under UIP, Immunization schedule		✓				
Unit V	7	5.1 Evaluation of MCH related National Health Programmes (NHP) and Understanding Reproductive Health Policy- Overview		✓		Didactic lecture Seminar/ JC Group discussion	20%	LE, SE
		5.2 Evaluation of NHP						
		5.3 Understanding Reproductive Health Policy Understanding Reproductive Health	✓					
		5.4 Policy – Voluntarism versus coercion Understanding Reproductive Health						
		5.5 Policy- Current trends and status of FP in India						

Unit VI	8	Basics of policy proposal and National Health Policy and Child Health policies 6.1 Introduction	✓			Didactic lecture Group discussion	15%	LE, SE
		6.2 Steps in policy proposal 6.3 National Health Policy - Introduction	✓					
		6.2 Salient features of National Health Policy	✓					
		6.3 Objectives of National Health Policy	✓					
		6.4 Child health policies - One child policy in China - Two child policy in India etc.	✓					

REFERENCE:

1. J.Kishore. Textbook of National Health Programmes in India.Century publisher; 5thedt. 2011
2. State & National PIP documents of RCH-II (Government of India) available at: https://nhm.gov.in/images/pdf/monitoring/joint-review-mission/jrm-8-aide-memoire.pdf
3. A Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) in India. Ministry of Health & Family Welfare Government of India
4. Revised operating manual for preparation and monitoring of RCH-II & immunization component of NRHM state programme implementation plans (PIPs). Ministry of Health & Family Welfare Government of India.
5. MOHFW, IMNCI-Module No. 1-9. Available at: https://main.mohfw.gov.in/Organisation/departments-health-and-family-welfare/activities-health-and-family-welfare/rch-imnc-training-material-imnci.
6. Unnithan M. Conflicted reproductive governance: The co-existence of rights-based approaches and Coercion in India's family planning policies. Anthropologies of Global Maternal and Reproductive Health: From Policy Spaces to Sites of Practice. 2022 Jan 11:117-36.

DISASTER AND EMERGENCY MANAGEMENT (S3)

INTRODUCTION TO DISASTER RISK MANAGEMENT AND HUMANITARIAN EMERGENCIES

Course type: DSE

Course code: AH02PH-2DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To describe the development of civil defense and emergency management.

CO2. To explain the value and role of disaster science for the practice of emergency management.

CO3. To describe the work of an emergency manager in various sectors and specializations.

CO4. To explain and adopt ethical principles and code of conduct for the practice of emergency management.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	8	Key Concepts, Definitions, and Perspectives Introduction to disaster: Emergency, Disaster, Catastrophe	✓			Didactic lecture Group Discussion	20%	SE
		The disaster life cycle	✓					
		-Major perspectives in disaster science: · The hazard tradition · The disaster tradition · The risk perspectives · The crisis approach	✓					
		Social vulnerability	✓					
		Resilience						

Unit II	10	History & Current Status of Emergency Management & Disaster Science Introduction to EM & DM	✓			Didactic lecture Group discussion Article review	10%	SE
		Current and future challenges	✓					
		The era of civil defense		✓				
		Professionalization of EM: Leadership challenges and structural changes	✓					
Unit II	10	History & Current Status of Emergency Management & Disaster Science Introduction to EM & DM	✓			Didactic lecture Group discussion Article review	10%	SE
		Current and future challenges	✓					
		The era of civil defense		✓				
		Professionalization of EM: Leadership challenges and structural changes	✓					
Unit III	10	Emergency Management Careers The profession of emergency management	✓			Didactic lecture Group discussion Article review	10%	SE
		Working in the profession of EM: Govt./private/ Voluntary sectors, international emergency management & humanitarian aid	✓ ✓	✓				
		Types of disaster: Hazards that can become disaster- Hurricanes, cyclones, earthquakes, floods, volcanoes, chemical/ biological/ radiological/ nuclear hazards, terrorism/ computer crimes or cyber terrorism, climate change						
		The Complexity of hazards that can become disaster						

Unit IV	7	Advancing Emergency Management through Disaster Science Introduction	✓			Didactic lecture Simulation exercises	25%	LE, SE
		Disaster science as a multidisciplinary field	✓					
		Importance of Disaster Science to Emergency Management	✓					
Unit V	10	Research process in emergency manag. Introduction to research process	✓			Didactic lecture Simulation exercises	25%	LE, SE
		- Types of research: Basic & applied research, Primary & Secondary research, Cros sectional & longitudinal research, Quantitative and Qualitative research	✓					
		Research methods: Surveys, Interview, Observation, Archives, Spatial tools	✓					
		Ethics and research challenges		✓				

➤ REFERENCE:

1. Brenda D. Phillips, David M. Neal, Gary R. Webb. Introduction to Emergency Management and Disaster Science. 3rdedt. 2021.

2. World Health Organization. Implementation of Health emergency and Disaster risk management. Available at: https://www.who.int/activities/implementing-health-emergency-and-disaster-risk-management.

3. United Nations Office for Disaster Risk Reduction. Disaster risk management. Available at: https://www.undrr.org/terminology/disaster-risk-management.

4. Tushar Bhattacharya. Disaster Science and Management, Tata McGraw Hill Education Publisher, 2012

INSTITUTIONAL FRAMEWORK FOR DISASTER AND HUMANITARIAN RESPONSE

Course type: DSE

Course code: AH02PH-2DSE2

Credits: 3 **Duration:** 45 hours

➤ COURSE OBJECTIVES:

At the end of the course, students will be able to:

CO1. Identify the organizations for managing disasters at the national, state and district levels.

CO2. Describe the Nodal Ministries for managing different types of Disasters.

CO3. Discuss the financial instruments laid down for implementing the Disaster management system.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	10	Institutional Framework of Disaster Management 1.1 Evolution of Disaster Management system in India	✓			Didactic lecture Group Discussion One minute paper	10%	SE
		1.2 Institutional Structure 1947-2002 -Institutional structure after 2002	✓					
		Paradigm shift in India	✓					
		1.3 Nodal ministries for managing different types of disasters - Nodal officer in Ministry of Home Affairs (MHA) - Crisis Management Group (CMG) National Crisis Management Committee (NCMC)	✓					

Unit II	8	1.2.1 Institutional arrangement at National level -National Disaster Management Authorities (NDMA) -National Executive Committee (NEC) - National Institute of Disaster Management (NIDM) - National Disaster Response Force	✓			Didactic lecture Assignment	25%	LE, SE
Unit III	12	3.1 Institutional arrangement at State level - State Disaster Management Authorities - State Executive Committee - State Disaster Response Force (SDRF) - State Steering Committee Working Group	✓			Didactic lecture Group discussion	25%	LE, SE
Unit IV	10	4.1 Institutional arrangement at District, Block and Village level- Power & Functions				Didactic lecture Simulation exercises	25%	LE, SE
		4.2 Mandates of Disaster Management Act 2005- Financial Provisions	✓					
		4.3 Disaster Management Act,2005	✓					
		4.4 Mitigation planning with stakeholders: Resilience, Inclusive mitigation planning, strategies for community engagement	✓					
Unit V	5	5.1 Disaster Management Programs & Schemes - National Disaster Management Program (NDMP) - Other Disaster Management Projects (ODMP)&sub schemes - Grants-in-Aid to National Institute of Disaster Management (NIDM) - National Cyclone Risk Mitigation Project (NCRMP)	✓ ✓ ✓			Didactic lecture Simulation exercises	15%	LE, SE

REFERENCE:

1. Disaster Management Division Ministry of Home Affairs, Govt. of India. Available at Schemes | NDM India (mha.gov.in).
2. Riddick, John F (2006). The History of British India: A Chronology, Greenwood.
3. National Disaster Management Division, Ministry of Home Affairs (2004): Disaster Management in India - A Status Report.
4. Ministry of Home Affairs, North Block, New Delhi. Ministry of Agriculture, (2001). Report of the High-Powered Committee on Disaster Management, National Centre for Disaster Management, Government of India, New Delhi.
5. Singh, Prakash, et.al. (2000). Disaster Response in India: Centre of Excellence in Disaster Management & Humanitarian Assistance & Foreign Military Studies Office, Fort Leavenworth, KS, USA

PUBLIC HEALTH PRACTICUM

Course type: SEC

Course code: AH02PH-2P1

Credits: 5 **Duration:** 20 hours/week

COURSE OUTCOMES:

At the end of the course students will be able to understand:

CO1. Develop skills and competencies in a practical setting.

CO2. Gain experience in accessing the public health needs in the community.

CO3. Develop interpersonal communication skills.

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage
Unit I		Demography 1.1 Small survey with students to map migration of families?	✓			Field visit Checklist Reflection writing	25%
		1.2 When and how did they migrate? Tabulate them	✓				
		1.3 Activities to map population density using GIS method	✓				
Unit II		Public Health Nutrition 2.1 Diet survey	✓			Field visit Checklist Reflection writing	25%
		2.2 Mealtime survey and analysis	✓				
		2.3 Visit to Malnutrition center	✓				
		2.4 Visit to ICDS center 2.5 Organizing an exhibition on Nutritional problems	✓				
Unit III		Public Health System 3.1Visit to Public Health System (Primary/Secondary/Tertiary)	✓ ✓			Field visit Checklist Reflection writing	25%
		3.2 Preparing a checklist of all the employees and their role – responsibilities in each of these	✓ ✓				
		3.3 Vaccine storage/ cold chain					
		3.4 Maintenance of registers of ANM and ASHA					
Unit IV		Epidemiology 4.1 Application of epidemiological methods	✓			Hands on training	25%

THIRD SEMESTER

Sl No.	Type	Course code	Course name	Hrs/wk			Credits	Max. Marks		Total marks
				L	T	P		IA	SEE	
1	CC	AH02PH-3C1	Health system research for evidence -based policy & practice in PH	2	1	-	3	50	50	100
2	CC	AH02PH-3C2	Infectious & chronic diseases	2	1	-	3	50	50	100
3	CC	AH02PH-1C3	Health education &Health Promotion	2	1	-	3	50	50	100
4	DSE	AH02PH-3 DSE1	S1,S2,S3	2	1	-	3	50	50	100
5	DSE	AH02PH-3 DSE2	S1, S2,S3	3	-	-	3	50	50	100
6	SEC	AH02PH-3P1	Public Health Practicum	-	-	20	5	50	50	100
7	OE	AH02PH-3ME1	Self-learning course SWAYAM/MOOC	-	-		3	50	50	100
Total				**11**	**4**	**20**	**23**	**300**	**300**	**600**

AH02PH-3DSE1: AH: Allied Health, **02**: Degree level (PG), PH: Programme (Public Health), **3**: Semester, **DSE1**: Discipline specific elective/Subject number.

AH02PH-3P1: AH: Allied Health, 02: Degree level (PG), **PH**: Programme (Public Health), **3P1**: Semester/ Practical/subject number

AH02PH-3ME1: AH: Allied Health, **02**: Degree level (PG), **PH**: Programme (Public Health), **3ME1**: Semester/ Multidisciplinary course/subject number

SEC: Skill enhancement course, **OE**: Open elective, **IA**-Internal Assessment, **SEE** – Semester End Examination, **Hrs/W**-Number of hours per week

Semester III		
Discipline Specific Elective (DSE) 2		
Code	**Specialization**	**Courses**
S1	Epidemiology	Health informatics, data science, and epidemiology
S2	Maternal and Child Health	Social & theoretical perspectives of Maternal Health
S3	Disaster and Emergency Management	Health in humanitarian emergencies
S4	Emergency Management	Contemporary practices in emergency management

Semester III		
Discipline Specific Elective (DSE) 1		
Code	**Specialization**	**Courses**
S1	Epidemiology	Analytical methods for epidemiology
S2	Maternal and Child Health	Reproductive, Maternal, Newborn, Child & Adolescent Health + Nutrition
S3	Disaster and Emergency Management	Working & Volunteering in humanitarian emergencies
S4	Emergency Management	Elective subject (16 points)

** Students pursuing a specialization in Emergency Management from Charles Sturt University, Australia, must fulfil the core courses outlined in the Graduate Certificate in Emergency Management.

HEALTH SYSTEM RESEARCH FOR EVIDENCE BASED POLICY & PRACTICE IN PUBLIC HEALTH

Course type: Core

Course code: AH02PH-3C1

Credits: 3 **Duration:** 45 hours

➤ COURSE OBJECTIVES:

At the end of the course, students will be able to:

CO1. Will develop skills and abilities to apply theories and frameworks required in health systems research and evidence building for health policy.

CO2. Will be able to make assessments of health policy, taking into account relevant scientific, social and equity aspects.

CO3. Demonstrate communication skills for advocacy, dissemination and evaluation of public health data policy and programmes.

CO4. Will be able to develop evidence for policy making by analyzing epidemiological studies and health system studies by prioritizing public health challenges.

CO5. Will be able to translate research knowledge for evidence-based policy making to deal with specific health problems.

CO6. Demonstrate financial planning and management skills for designing evidence based public health policies.

CO7. Will develop the ability to synthesize evidence, and apply statistical, financial, economic,& cost effectiveness tools/techniques in policy and programme analysis.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Health policy, process and planning 1.1 Policy making: key components	✓			Lecture Engage in community health programmes	10%	SE
		1.2 Basic theoretical approaches and concepts used in policy analysis	✓					
		1.3 Effects of national and international affairs on health policy			✓			
		1.4 Understanding of global and national health policies		✓				
		1.5 Short term Vs long term policies	✓					
Unit II	8	Translating research for Health Policy and Advocacy 2.1 Using research and data to drive good policy making	✓			Lecture Presentation	20%	LE, SE
		2.2 Evidence based policy	✓					
		2.3 Different theories useful in policy analysis	✓					
		2.4 political nature of evidence for policy making in health		✓				
		2.5 Different forms of power influential to policy making	✓					

		2.6 Concepts of Governance and Institutions	✓					
		2.7 Written and verbal competence in communicating evidence to inform policy			✓			
Unit III	7	Current issues in health policy 3.1 National and global perspective	✓			Lectures Group discussion	10%	SE
		3.2 Issues related to - role of Non-governmental Organizations (NGOs) - health service delivery and program implementation	✓					
		3.3 Research and evidence generation	✓					
		3.4 Training and education	✓					
		3.5 Inter-sectoral coordination in health including Public Private Partnership	✓					
		3.6 Advocacy and Planning		✓				
Unit IV	8	The health system framework 4.1 Health system and policy research	✓			Lectures Group discussion	20%	LE, SE
		4.2 Synthesizing and communicating research evidence		✓				
		4.3 The health system framework and methods		✓				
Unit V	8	The economic way of thinking about health 5.1 Health economics for designing health policy	✓			Lectures Group discussion	20%	LE, SE
		5.2 Introduction to health economics	✓					
		5.3 Health measurement and determinants	✓					
		5.4 Fundamentals- Demand. Supply, consumption, saving, investment		✓				

		5.5 Supply and demand for healthcare	✓			Lectures Group discussion	20%	LE, SE
		5.6 Measures of economic development		✓				
		5.7 GNP, NNP, and GDP in shaping health policy	✓					
		5.8 Health infrastructure and financing	✓					
		5.9 Economic models of health			✓			
Unit VI	7	Health care financing 6.1 Health care spending	✓			Lectures Group discussion	20%	LE, SE
		6.2 Types of health economic evaluation		✓				
		6.3 Health insurance	✓					

REFERENCE:

Essential readings

1. Fuchs, Victor R. "What is Health Economics?" In The Future of Health Policy. Boston: Harvard University Press, pp. 27-40.
2. Baker, M., Stabile, M., and Deri, C. "What Do Self-Reported Objective Measures of Health Measure?" Journal of Human Resources, 39(4), pp.1067-1093
3. Aaron, H. and P. Ginsburg. 2009. "Is Health Spending Excessive? If So, What Can We Do About it?" Health Affairs, 28(5): 1260-1275.
4. Grossman, Michael. 1972. On the Concept of Health Capital and the Demand for Health. Journal of Political Economy 80 (2): 223–255. Becker, Gary S., Tomas J. Philipson, and Rodrigo R. Soares. 2005. The Quantity and Quality of Life and the Evolution of World Inequality. American Economic Review. 95(1): 277-91.
5. Culyer AJ, Newhouse JP, editors. Handbook of health economics. 1st ed. Amsterdam ; New York: Elsevier; 2000. 2 p. (Handbooks in economics).

Essential readings

1. Geruso, Michael, and Timothy J. Layton. "Selection in Health Insurance Markets and Its Policy Remedies." Journal of Economic Perspectives 31, no. 4 (2017): 23-32, 45-47.
2. Geruso, Michael, and Timothy J. Layton. "Selection in Health Insurance Markets and Its Policy Remedies." Journal of Economic Perspectives 31, no. 4 (2017): 23-32, 45-47.

3. Lagarde, Mylène, and Natasha Palmer. "The impact of user fees on access to health services in low-and middle-income countries." Cochrane Database of Systematic Reviews 4 (2011). Abstract and Plain Language Summary ONLY.

INFECTIOUS AND CHRONIC DISEASES

Course type: Core

Course code: AH02PH-3C2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Understand the basic common terminologies behind infectious disease

CO2. Recognize the major burden of disease which is commonly affecting the population

CO3. Understand the nature of disease and its disease transmission cycle

CO4. Examine the factors contributing to the persistence of infectious diseases

CO5. Analyze the transmission dynamics of disease and design appropriate control measures

CO6. Apply the epidemiological triad to the prevention of disease & promotion of health

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	5	Introduction to infectious & Chronic diseases 1.1 Overview	✓			lecture Group discussion	15%	SE
		1.2 Immune system		✓				
		1.3 Classification & burden of disease	✓					
		1.4 Disease Cycle	✓					

		1.5 Outbreak investigation- Surveillance monitoring	✓					
		1.6 Overview of National health programmes (NHP)	✓					
Unit II	10	Vaccine preventable diseases 2.1 Introduction, Definition, types of vaccines and its importance	✓			Didactic lecture Group discussion Seminar	20%	LE, SE
		2.2 Mumps, Measles, Polio, Pertussis, TB, Rotavirus	✓					
		2.3 Diphtheria, Tetanus, Rubella, Influenza, Whooping cough, Yellow fever, Rabies	✓					
		2.4 Universal immunization programme (UIP)	✓					
Unit III	10	Vector borne, Zoonotic and GI related Diseases 3.1 Vector borne diseases: Dengue, Malaria, Chikungunya, Zika virus fever, Yellow fever, Filariasis, Japanese encephalitis (JE), Prevention and vector control measures, NVBDCP	✓			Didactic lecture Assignment Seminar presentation	20%	LE, SE
		Zoonotic diseases: Rabies, Brucellosis, Plague, Leptospirosis, Nipah virus, Leishmaniasis, Kyasanur forest disease (KFD)	✓					
		3.3 Gastrointestinal System: Cholera, Typhoid fever, Diarrohea, Food poisoning, Hook worm infection, Cirrhosis of liver & fatty live						
Unit IV	10	Chronic Diseases 4.1 Overview and classification	✓			Didactic lecture Assignment Seminar presentation	20%	LE, SE
		4.2 Lifestyle related Diseases: Cardiovascular diseases (CVD), Cancer, Obesity, Diabetes, NP-NCD	✓					
		4.3 Sexual and reproductive diseases: Syphilis, Gonorrhea, HIV/AIDS		✓				

Unit V	4	5.1 Overview of Environmental & occupational health hazards	✓			Didactic lecture	10%	SE
		5.2 Environmental related diseases: - Biological: Viral, Bacterial, Protozoal, Helminthic Chemical: Cyanosis, Dental Health, Vector borne and CVD	✓					
Unit VI	6	6.1 Occupation related diseases - Occupation related diseases Physical: Radiations, Heat, Pressure, injury, Noise, injuries, accidents, burns, mechanical	✓			Didactic lecture seminar Group discussion	15%	LE, SE
		6.3 Chemical: Dust, organic dust, metals and their components	✓					
		6.4 Biological: Brucellosis, Leptospirosis, anthrax, fungal infection		✓				
		6.5 Cancer: Skin, Lungs. Bladder		✓				
		6.7 Safety measures and provisions: ESI, Factory Act-1948, Maternity benefit scheme			✓			

➤ REFERENCE:

1. AH Suryakanta. Textbook of Community Medicine with recent advances, 4th edt. 2017
2. K Park. Textbook of preventive and social medicine. M/s Banarasidas Bhanot, Jabalpur
   26th edt.2021.
3. Sunderlal, Aadharsh and Pankaj. Textbook of Preventive and Social Medicine. 8thedt.2023.
4. J.Kishore. Textbook of National Health Programmes in India, 14 edt.2022.
5. Manthappa M. Textbook of Manipal Prep Manual of Medicine. 3rd edt.2021.

HEALTH EDUCATION AND HEALTH PROMOTION

Course type: Core

Course code: AH02PH-3C3

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Understand the importance of various tools and techniques of health education.

CO2. Learn to apply various methods/channels/tools of health communication and barriers for the same.

CO3. Understand the importance of health promotion and role of media in promoting healthy lifestyle among the general population.

CO4. Understand the role of corporate sectors, Government and private organizations in implementing the cost-effective health promotion strategies.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Health education 1.1 Overview	✓			Didactic Lecture Group discussion	15%	SE
		1.2 Objectives & Principles	✓					
		1.3 Tools/methods	✓					
		1.4 Health education & propaganda	✓					
		1.5 Adoption process- Rogers model		✓				
Unit II	8	Health communication 2.1 Overview on behavior change theories and communication	✓			Didactic lecture Group discussion Flipped classroom	15%	SE
		2.2 Channels of health communication (Individual, Group, Mass & Target groups)	✓					

		2.3 Implementing and managing social and behavior change communication in PH Information, Education & Communication (IEC) Inter-personal communication (IPC) Behavior Change Communication (BCC) Social Behavioral Change Communication (SBCC)		✓				
		2.4 Barriers in communication	✓					
		2.5Tools and Techniques FGD Role play Fishbowl technique PLA technique Counseling etc	✓					
Unit III	7	Health promotion approaches and methods 3.1 Overview on health promotion	✓			lecture Assignment Seminar presentation One minute test	25%	LE, SE
		3.2 Foundations for health promotion	✓					
		3.3 The Ottawa charter						
		3.4 Social determinants & health promotion		✓				
		3.5 Communication strategies for health promotion						
		3.6 Community need assessment for designing an effective health promotion activity						
		3.7 Evaluation of health promotion plans						
		3.7 Evaluation of health promotion plans						
		3.8 Role of professionals in health promotion						
Unit IV	8	Role of media in health promotion 4.1 Mass media	✓			lecture Assignment Seminar presentation Quiz	15%	LE, SE
		4.2 Interpersonal communication	✓					
		4.3 Role of communication in promoting healthy lifestyle	✓					

Unit V	7	Cost effective health promotion strategies 5.1 Role of corporate in health promotion	✓			Didactic lecture Flipped classroom	20%	LE, SE
		5.2 Role of internet viz. email, web portals etc. in health promotion		✓				
		5.3 Role of government and private sector in health promotion	✓					

➤ REFERENCE:

1. Ramachandran L. Health education: a new approach. Vikas Publishing House; 2009.
2. Sparks L, O'Hair HD, Wright KB. Health communication in the 21st century. John Wiley & Sons; 2012.
3. Schiavo R. Health communication: From theory to practice. John Wiley & Sons; 2013.
4. J. Kishore. Textbook of National Health Programmes in India.Century publisher; 5thedt. 2011
5. Suryakantha AH. Textbook of community medicine with recent advances. India: Jaypeebrother's medical publication. 2017.
6. Park K. Park's textbook of preventive and social medicine. Jabalpur. Banarasidas Bhanot. 2011.

SPECIALIZATION: EPIDEMIOLOGY (S1)

HEALTH INFORMATICS, DATA SCIENCE AND EPIDEMIOLOGY

Course type: DSE

Course code: AH02PH-3DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Describe the fundamental concepts and principles of health informatics, data science, and epidemiology, and their application in public health.

CO2. Identify and select appropriate health information systems and data management tools for public health practice.

CO3. Analyze and interpret data using appropriate statistical techniques and software.

CO4. Apply epidemiological concepts to investigate public health problems and identify potential solutions.

CO5. Communicate epidemiological findings and data analyses effectively to diverse audiences, including public health professionals and the general public.

CO6. Evaluate the ethical, legal, and social issues associated with health informatics, data science, and epidemiological research and practice.

CO7. Visualize and interpret data and effectively communicate results and findings using concepts and methods of epidemiology and informatics.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	Introduction to Health Informatics, Data Science and Epidemiology 1.1 Role of informatics & data science in public health and epidemiology	✓			Didactic lecture Engage in community health programmes	10%	SE
		1.2 Principles & concepts of PH informatics	✓					
		1.3 Understanding the principles of data management, data mining in healthcare		✓				
Unit II	8	Fundamentals of computers and database systems 2.1 Basic elements of a computer system	✓			Didactic lecture Presentation Assignment	20%	LE, SE
		2.2 Computer networks – Local Area Network (LAN), Wide Area Network (WAN), Internet & World Wide Web	✓					
		2.3 MS Access, Database design, Table design - Variables and data types - Relational designs - Retrieving data from database	✓					

Unit III	7	Significance of information systems in public health 3.1 Information Architecture	✓			Didactic lectures Group discussion Assignment	20%	LE, SE
		3.2 Core-competencies in public health informatics	✓					
		3.3 Public health informatics and organizational change						
		3.4 Managing IT personnel and projects	✓					
		3.5 Assessing the value of information systems		✓				
		3.6 Knowledge based information and systems						
		3.7 Risk factors in information systems						
Unit IV	8	Health Information Systems (HIS) & Data Management 4.1 HIS-structure and principles	✓			Didactic lectures Group discussion Assignment	20%	LE, SE
		4.2 Electronic Health Record (EHR) systems and their use in clinical care and public health	✓					
		4.3 Data standards in public health informatics and interoperability	✓					
		4.4 Data quality, cleaning, & preparation for analysis	✓					
		4.5 Health database design and management			✓			
		4.6 Decision support and expert systems in public health	✓					
		4.7 Informatics project planning and programmes		✓				
Unit V	8	Applications of informatics and data science in Public Health 5.1 Disease surveillance	✓			Didactic lectures Presentation Discussion with subject experts/ field visits	20%	LE, SE
		5.2 Outbreak investigation	✓					
		5.3 Population health management and healthcare delivery	✓					

		5.4 Use in evidence-based health policy and decision-making	✓					
		5.5 Dealing with health equity and disparities	✓					
		5.6 Public health information systems (PHIS)- Telemedicine	✓					
Unit VI	7	Ethical & Legal Issues in Health Informatics and Data Science 6.1 Confidentiality, privacy, and security of health data	✓			Lectures Presentation seminar/ workshop	10%	SE
		6.2 Legal and regulatory issues related to health data collection, storage, and use	✓					
		6.3 Ethical considerations in data science and epidemiology research		✓				

REFERENCE:

Essential Readings

1. Hersh, W. R. (2009). Health Informatics: A Required Competency for the 21st Century. Journal of Medical Library Association, 97(2), 91–93. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2670200/
2. Krumholz, H. M. (2014). Big data and new knowledge in medicine: The thinking, training, and tools needed for a learning health system. Health Affairs, 33(7), 1163-1170. URL: https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2014.0053
3. Rothman, K. J., & Greenland, S. (2005). Causation and causal inference in epidemiology. American Journal of Public Health, 95(Suppl 1), S144-S150.
4. Health Information Management Systems Society (HIMSS). (2021). HIMSS Dictionary of Healthcare Information Technology Terms, Acronyms and Organizations.
5. O'Carroll PW. Public health informatics and information systems. New York: Springer; 2011.
6. Wager KA, Lee FW, Glaser JP. Health care information systems: a practical approach for health care management. Fifth edition. Hoboken, NJ: Jossey-Bass; 2022.

Suggested Readings

1. Szklo, M., & Nieto, F. J. (2014). Epidemiology: Beyond the Basics (3rd ed.). Jones & Bartlett Learning. (Chapter 2: Epidemiologic Measures)
2. Armitage, P., & Berry, G. (2019). Statistical Methods in Medical Research (5th ed.). Blackwell Publishing. (Chapter 2: Descriptive Statistics and Graphical Methods)
3. Centers for Disease Control and Prevention and University of Washington's Center for Public Health Informatics. Competencies for Public Health Informaticians. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention. 2009.
4. Magnuson JA, Paul C. Fu, Jr., editors. Public health informatics and information systems. New York: Springer; 2013.
5. Wager KA, Lee FW, Glaser JP. Health care information systems: a practical approach for health care management. Fifth edition. Hoboken, NJ: Jossey-Bass; 2022.
6. Haleem A, Javaid M, Singh RP, Suman R. Telemedicine for healthcare: Capabilities, features, barriers, and applications. Sens Int. 2021;2:100117.
7. Shaw NT, McGuire SK, Understanding the use of geographical information systems (GISs) in health informatics research: a review, BMJ Health & Care Informatics 2017;24:doi: 10.14236/jhi.v24i2.940

ANALYTICAL METHODS FOR EPIDEMIOLOGY

Course type: DSE

Course code: AH02PH-3DSE2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Students will get conceptual clarity of epidemiological studies and classification.

CO2. Learning to interpret epidemiological results.

CO3. Understanding of the concept of association and causation.

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	8	1.1 Concept of Epidemiological Studies		✓		Didactic lectures Assignment	20%	LE, SE
		1.2 Observation Analytical, Experimental Cross sectional Longitudinal and Others	✓					
Unit II	10	2.1 Analytical Studies	✓			Didactic lectures Seminar Assignment	20%	LE, SE
		2.2 Cohort, Case control Before-After studies Historical prospective studies Randomized control trial, Community Trial, Ecological Studies, Meta-analysis	✓					
Unit III	8	3.1 Experimental epidemiological studies	✓			Didactic lectures Flipped classroom Assignment Seminar	20%	LE, SE
		Animal studies - Human experiments - Randomized control trials Types of RCT- Clinical, Preventive, Risk Factor, Cessation experiments, Trial of aetiologicalagents, Evaluation of health services	✓					
Unit IV	5	4.1 Non-Randomized Trials	✓			Didactic lectures	10%	SE
		4.2 Uncontrolled trials Natural experiments Before and After comparison studies	✓					
Unit V	2	5.1 Other Study Designs Concurrent parallel study, Cross-over type of studies	✓			Didactic lectures	10%	SE

Unit VI	13	6.1 Analytical Concepts Risk factor Matching Cause-effect relation Odds Ratio Exposure rate Incidence rate Relative risk Attributable risk Attrition Case Fatality rate Indirect associations Spurious association Associations & causation	✓			Didactic lectures and Problem based exercises	20%	LE, SE

➤ REFERENCE:

1. K.Parks's Textbook of Preventive and social medicine M/S Banarasidas Bhanot publishers.
2. Oleckno, William, Essential Epidemiology: Principles and Applications, Waveland Press, Inc.,2002
3. Gordis L. Epidemiology e-book. Elsevier Health Sciences; 2013 Nov 14.
4. Ann Aschengrau, Essentials of Epidemiology in Public Health, Jones & Bartlett Publishers.

SPECIALIZATION: MATERNAL AND CHILD HEALTH (S2)

SOCIAL & THEORETICAL PERSPECTIVE OF MATERNAL HEALTH

Course type: DSE

Course code: AH02PH-3DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To get a conceptual understanding of the difference between Sex and Gender

CO2. To understand the social determinants of maternal health

CO3. To get the concept of Life course perspective in maternal health

CO4. To have a conceptual understanding of Family planning, reproductive health, maternal, child and adolescent health.

CO5. To understand the concept of three delays and have a theoretical understanding of maternal health

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	4	Sexual orientation and gender identity 1.1 Concept of Sex and Gender- Define sex, gender, masculinity, feminism	✓			Didactical Lecture Group discussion	10%	SE
		1.2 Assessing the differences based on biology, social construct, culture	✓					
		1.3 Agents of gender socialization Distinguish between transgender, transsexual, intersexual, & homosexual identities.	✓					
Unit II	8	Social determinants ofHealth and Life course perspective 2.1 Importance &relevance of the social determinants of maternal health in regard to the health of families, women, adolescents and children	✓			Didactical Lecture Group discussion Assignment Quiz	15%	LE, SE
		2.2 Women & Child health goals in Sustainable Development Goals (SDG)	✓					
Unit III	10	Reproductive Health and Family Planning (FP) 3.1 History of Family Planning Importance of FP			✓	Didactical Lecture Seminar	15%	LE, SE
		3.2 Concept of Unmet need Reproductive Health - Essential Interventions		✓				
		3.3 Global burden of RH	✓					

Unit IV	6	4.1 Maternal Mortality	✓			Didactic Lecture MCQs	20%	LE, SE
		4.2 Burden of Maternal Mortality	✓					
		4.3 Causes of Maternal Mortality	✓					
		4.4 Understand the "3 delays"	✓					
Unit V	12	5.1 Child Health and Adolescent Health	✓			Didactic Lecture Seminar Assignment	25%	LE, SE
		5.2 Epidemiology of child health globally	✓					
		5.3 Interventions to reduce child mortality, promote healthy development, and foster equitable outcomes – historically and today.	✓					
		5.4 Issues in delivering child health in SDG era	✓					
		5.5 Adolescent Health - Defining adolescence and adolescent health as an emerging area of focus	✓					
		5.6 Epidemiology of adolescent health globally, with a focus on reproductive health	✓					
Unit VI	5	Theoretical Perspectives of Maternal Health 6.1 Theories of Maternal Health Maternal role attainment theory Bonding and attachment theory Synatic theory of infant development	✓			Didactic lecture Group discussion	15%	LE, SE
		6.2 Universe of development care model	✓					
		6.3 Mother and child integrative development model	✓					
		6.4 Barnard's Parent-child interaction model)	✓					

➤ REFERENCE:

1. Ndikom KC and Akinwaare MO (2014). Theories and Models applicable in Maternal and Child Health Nursing. Book Chapter. In book: Essentials Concepts and Issues in Nursing Publisher: Samdavies

2. Mukesh H., Marjolein D, Vincent DB and Tjard de Cock Buning: Social determinants of maternal health: a scoping review of factors influencing maternal mortality and maternal health service use in India. Hamal et al. Public Health Reviews (2020) 41:13 https://doi.org/10.1186/s40985-020-00125-6

3. Mukesh H., Marjolein D, Vincent DB and Tjard de Cock Buning: Social determinants of maternal health: a scoping review of factors influencing maternal mortality and maternal health service use in India. Hamal et al. Public Health Reviews (2020) 41:13 https://doi.org/10.1186/s40985-020-00125-6

4. Mattson, S (2010) "Millennium Development Goals and Global Women's and Infants' Health," Journal of Obstetrics, Gynecology and Neonatal Nursing, 39: 573-579

5. Rosenfield A., Maine D. (1985). Maternal mortality- A neglected tragedy. Where is the M in MCH? Lancet, 2(8446):83-5.DOI: 10.1016/s0140-6736(85)90188-6

6. Family planning in India: The way forward, Poonam Muttreja and Sanghamitra SinghIndian Med Res. 2018 Dec; 148(Suppl 1): S1–S9. doi: 10.4103/ijmr.IJMR_2067_17

7. Reproductive, Maternal, Newborn, and Child Health: Disease Control Priorities, Third Edition (Volume2).https://www.ncbi.nlm.nih.gov/books/NBK361926/table/ch1.sec5.table1/

REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH AND NUTRITION

Course type: DSE

Course code: AH02PH-3DSE2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Understand the principle of 5×5 matrix for RMNCHA.

CO2. Understand the Priority interventions by the Government at all stages of life.

CO3. To understand the latest achievements in the field.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	7	1.1 RMNCHA Concepts 5×5 matrix	✓			Didactic lecture	10%	SE
		1.2 RMNCHA	✓					
Unit II	8	Priority Interventions (Adolescents) 2.1 Iron and Folic acid supplement	✓			Didactic lecture Group discussion	20%	LE, SE
		2.2 Adolescent Friendly Health Clinics (AFHC)	✓					
		2.3 Counselling and Information on adolescent Sexual and Reproductive Health (SRH) issues	✓					
		2.4 Menstrual Hygiene	✓					
		2.5 Deficiency diseases and disability	✓					
Unit III	7	3.1 Priority Interventions (Pregnancy)	✓			Didactic lecture Group discussion	20%	LE, SE
		3.2 Folic acid in pre-conception period		✓				
		3.3 Ante natal package and tracking high risk pregnancy	✓					
		3.4 Skilled obstetrics care	✓					
		3.5 Emergency Obstetric and New borne care	✓					
		3.6 Post partum care for maternal and childcare	✓					
		3.7 Post partum IUCD insertion and sterilization	✓					
		3.8 Preconception (PC) and PNDT Act	✓					
Unit IV	8	4.1 Priority Interventions (New Borne and childcare)	✓			Didactic lecture Group discussion Assignment	15%	LE, SE
		4.2 Home-based Newborn care and prompt referral	✓					
		4.3 Facility based care of sick newborn	✓					

		4.4 Child nutrition and essential micronutrient supplementation	✓					
		4.5 Integrated Management of common childhood illnesses and Immunization	✓					
		4.6 Child health screening Early intervention services (RBSK)	✓					
Unit VI	8	6.1 Programs under RMNCHA+N	✓			Didactic lecture Group discussion	20%	LE, SE
		6.2 Family Planning		✓				
		6.3 Child health		✓				
		6.4 Maternal health		✓				
		6.5 Immunization		✓				

➤ REFERENCE:

1. RMNCHA+N. Available at: RMNCH+A :: National Health Mission (nhm.gov.in)
2. PowerPoint Presentation (nhm.gov.in)

SPECIALIZATION: DISASTER & EMERGENCY MANAGEMENT (S3)

HEALTH IN HUMANITARIAN EMERGENCIES

Course type: DSE

Course code: AH02PH-3DSE1

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

CO1. Mainstream disaster management into the developmental planning process.

CO2. Promote a culture of prevention, preparedness, and resilience at all levels through knowledge, innovation and education.

CO3. Encourage mitigation measures based on technology, traditional wisdom, and environmental sustainability.

CO4. Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	10	Preparedness - Definition - Types - Levels of preparedness • Individual level • household's level • Organization level • Community level	✓			Didactic lecture Group Discussion	15%	LE, SE
		- Factors influencing levels of preparedness • Previous experience of disaster • Risk perception	✓					
		Preparedness initiatives at state, national and international level		✓				
		Working & volunteering in preparedness	✓					
Unit II	8	Planning • Principles and types of planning: Planning across life cycle of emergency management	✓			Didactic lecture Group discussion Assignment	15%	LE, SE
		-Levels of planning: • Individual & household level planning, • Community-based planning • State and national planning guidance	✓					
		Working & volunteering in planning		✓				
Unit III	12	Response Definition & activities: defining response, typical response activities	✓			Didactic lecture Group discussion Flipped classroom Assignment	15%	LE, SE
		-Disaster warning: • Warning process, • Characteristic of effective disaster warning, • Taking protective action(Evacuation and temporary sheltering)	✓					

		Disaster response- National and international context	✓			Didactic lecture Group discussion Flipped classroom Assignment	25%	LE, SE
		Disaster response and principles of effective emergency management: • Comprehensive, • integrated emergency management	✓					
Unit IV	7	Recovery - Introduction - Definition and - Recovery as a process	✓			Didactic lecture Simulation exercises	20%	LE, SE
		• Recovery functions: need assessment, shelter & housing, infrastructure, environmental concerns, psychological impacts etc.	✓					
		• People centered recovery: recovery planning	✓					
Unit V	8	**Mitigation** - Introduction - Definition -Types (Structural & non-structural mitigation)	✓			Didactic lecture Experiential learning Seminar presentation	25%	LE, SE
		- What are the risks?: • Threat and hazard identification, • Risk assessment (social vulnerability assessment and loss estimation)	✓					
		• Mitigation planning with stakeholders: Resilience, Inclusive mitigation planning, strategies for community engagement	✓					

➤ REFERENCE:

1. Introduction to Emergency Management and Disaster Science Brenda D. Phillips, David M. Neal, Gary R. Webb. 3rd edt,2021.

2. Tushar Bhattacharya. Disaster Science and Management, Tata McGraw Hill Education Publisher, 2012
3. Volunteerism and Disasters (2011), UNDP: An extract from the 2011. State of the World's volunteerism Report.
4. P Singer, Faith groups provide the bulk of disaster recovery, in coordination with FEMA, USA Today, on the internet at: www.usatoday.com/story/news/politics/2017/09/10/hurricane-irma-faith-groups-provide-bulk-disaster-recovery-coordination-fema/651007001.

WORKING AND VOLUNTEERING IN HUMANITARIAN EMERGENCIES

Course type: DSE

Course code: AH02PH-3DSE2

Credits: 3 **Duration:** 45 hours

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. To ensure understanding of the role and contribution of Private and Public agencies in Emergency Management

CO2. To ensure understanding of the role and contribution of International Agencies in Emergency Management

CO3. To describe working with various independent groups like refugee camps, refugee resettlement and urban environment.

CO4. To discuss the next generation emergency managers and disaster scientists.

➤ COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage	Type of Question
Unit I	10	Public Sectors Local Government -Elected officials and emergency management -Local Departments -State Government -Role of the Governor -Emergency Managt. • -Accredited State and Local Government	✓			Didactic Lecture Group Discussion	15%	SE

Unit II	10	Private Sectors -Importance & Impacts of Disaster on Private sector • Direct impacts • Indirect impacts • Remote impacts Private sector & life cycle of emergency Management -Preparedness - Response - Recovery - Mitigation Public and Private Partnership	✓ ✓ ✓			Didactic Lecture Group Discussion	15%	LE, SE
Unit III	8	Contemporary practices - Working and volunteering in Private Sector - International Emergency Management - UN on Refugees - Climate change and Disaster response - UN cluster system - Sphere - Working at international context - Cultural awareness & integrating context - Community integration Guidance for helping Non-Aid Workers	✓ ✓			Didactic lecture Seminar Discussion with subject expert Assignment	25%	LE, SE
Unit IV	12	Working with Refugees in Camps, Urban Environments, Refugee Resettlement -Refugee Camps -Urban Refugees -Refugee Resettlement -International Aid Workers	✓			Didactic lecture Group discussion One minute paper	25%	LE, SE
Unit V	5	Next Generation of Emergency managers and Disaster scientists -Reflecting on cultural differences -Mentoring and Networking -Education Programs and Training		✓		Didactic lecture Simulation exercises	25%	SE

REFERENCE:

1. Introduction to Emergency Management and Disaster Science Brenda D. Phillips, David M. Neal, Gary R. Webb. 3rd edition. 2022.
2. National Disaster Management Authority, Government of India. Accessed at: Home | NDMA, GoI
3. Volunteerism and Disasters (2011), UNDP: An extract from the 2011. State of the World's volunteerism Report.
4. M. Fernandez, On Roads Turned Waterways, Volunteers Improvise to Save the Trapped and Desperate, The New York Times, on the internet at www.nytimes.com/2017/08/29/us/volunteer-rescue-crews-hurricane-harvey-houston.html.
5. P Singer, Faith groups provide the bulk of disaster recovery, in coordination with FEMA, USA Today, on the internet at www.usatoday.com/story/news/politics/2017/09/10/hurricane-irma-faith-groups-provide-bulk-disaster-recovery-coordination-fema/651007001.

PUBLIC HEALTH PRACTICUM

Course type: SEC

Course code: AH02PH-3P1

Credits: 5 **Duration:** 20 hours/week

COURSE OUTCOMES:

At the end of the course students will be able to understand:

CO1. Public health course will provide necessary, knowledge, skills, hands on experience to address the public health challenges effectively

CO2. To understand the health service system at all the levels

CO3. To understand the issues related to existing health institutions at various levels of health care

CO4. To understand the socio economic characteristics of village and its interface with health status

CO5. To understand the roles and responsibilities of key members of the village in the community

COURSE CONTENT:

Unit	Hrs	Content	Must Know	Good to Know	Desirable to Know	Teaching Learning Method	Weightage
Unit I		Understanding Health care system/Public health system in India 1.1 Tertiary care level	✓			Checklist preparation Field visit Interaction with healthcare providers at all the levels	20%
		1.2 Secondary care level	✓				
		1.3 Primary care level	✓				
Unit II		Understanding the outbreak investigation procedure 2.1 Visit to Integrated disease surveillance programme Cell	✓			Filed visit Preparing questionnaire and interaction with programme officer Report writing	20%
		2.2 prepare an interview schedule for District programme officer	✓				
Unit III		Understanding system at the village level 3.1 Social Mapping of the village	✓			Group discussion Records and Report Presentation	30%
		3.2 Conduct household survey	✓				
		3.3 Prepare an Interview schedule for key members of village (Village members, Community leaders, religious leaders, Traditional health healers)					
		3.4 Prepare Interview schedule for ASHA, Dai, AWW					
Unit IV		Statistical methods and its applications 4.1 Reference manager (Mendely, Zotero)	✓			Hands on training	30%
		4.2 Epi-collect	✓				
		4.3 GIS	✓				

FOURTH SEMESTER

Sl No.	Type	Course code	Title of paper	Hrs/wk			Credits	Max. Marks		Total marks
				L	T	P		IA	SEE	
1	RP	AH02PH- 4RP1	Dissertation	-	-	-	12	100	100	200
2	SEC	AH02PH- 4I1	Internship	-	-	24	12	100	100	200
Total				**-**	**-**	**-**	**24**	**200**	**200**	**400**

AH02PH- 4RP1: **AH**: Allied Health, **02**: Programme (PG), **PH**: Public Health, **4RP1**: Semester/Research project/Subject number.

SEC: Skill Enhancement course, **IA**-Internal Assessment, **SEE** – Semester End Examination **Hrs/W**-Number of hours per week

DISSERTATION

Course type: RP

Course code: AH02PH-4RP1

Credits: 12 **Duration:** 3 months

➤ COURSE OUTCOMES:

At the end of the course, students will be able to:

CO1. Apply and integrate the skills and knowledge gained in theory.

CO2. Gain hands on experience on public health practice: such as planning, Organizational structure, community interaction, etc.

CO3. Demonstrate competency in public health practice.

CO4. Demonstrate leadership, teamwork, creativity, communication skills in public health domain.

➤ Contents:

Each candidate pursuing the MPH Programme is required to carry out a Research project/Dissertation on a selected topic under the guidance of a faculty after the submission of project proposal. The topic for the Project Work should be chosen based on an area of interest according to the Department and University guidelines under the constant supervision of the allotted Guide.

Guidelines:

- Each candidate is required to carry out a dissertation on a selected topic under the guidance of an eligible faculty.
- The Public Health project offers students an opportunity to plan a study, prepare research tools, collect data in the field, analyze the data, and write up the project under the guidance of the faculty.
- The topic for the Dissertation should be chosen based on an area of public health interest and should be done in a community/institute/hospital etc. The aim of the dissertation is to enable the student to gain an in-depth insight into a particular subject/topic chosen for study.
- Students shall use scientific methods of research, it could be - quantitative/qualitative/mixed methods. A student selects the tentative research topic in the second semester, in consultation with the concerned faculty.
- The synopsis shall be presented to the Board of Studies for acceptance. If found suitable shall register the dissertation topic. No change in the dissertation topic or guide shall be made without prior approval of the University. The candidate should start collecting data only after getting Scientific Review Board (SRB) and Institutional Ethics Committee (IEC) Approval. Data collection, analysis, interpretation, and report writing can be spread in fourth semesters.
- Every candidate shall submit the synopsis containing particulars of proposed dissertation within nine months from the date of commencement of the course.

The dissertation should be structured under the following suggested headings:

- Title
- Abstract
- Introduction
- Review of literature
- Rationale /Need of the study
- Research question/Hypothesis
- Aim/Objectives of the study
- Methodology
- Results/Findings
- Discussion
- Conclusion
- Limitations of the study
- Recommendations
- Summary
- References/Bibliography
- Annexure

INTERNSHIP/BLOCK PLACEMENT

Course type: SEC

Course code: AH02PH-4I1

Credits: 12 **Duration:** 24 hours/ week

Internship is considered an important part of the academic curriculum, serving as a structured and significant educational experience that takes place in an agency, institution, or community in any developing or developed country, and under the supervision of Field Supervisors and the guidance of the student's Academic Advisor. The overall purpose of the field experience is to provide an opportunity for students to integrate theory and practice in a public health work environment. The student contributes to a community 's resources and to the solution of public health problems while developing personal confidence and leadership skills as a public health professional. While at work students could synthesize, hone skills and competencies in program design, implementation, management, and evaluation; research data collection, analysis, and reporting; and policy analyses and advocacy.

The field experience may include work in administrative, research, or clinical settings, or participation in ongoing health education, research, or program activities. The topics are individually selected and tailored to meet student needs. Decisions on the nature, location, objectives, and activities of the field experience are made through discussion and agreement among the student, academic advisor, and site/field supervisor.

The Site/Field Supervisor

The site/ field supervisor oversees the field experience at the chosen site. The site supervisor should have expertise in assigned project areas, experience and status within the organization, and an interest and competence in supervising and mentoring. The site supervisor also helps the student develop the MPH field experience activities (along with the Academic Advisor), and reviews and signs the Learning Contract prior to the field placement. Finally, the site supervisor writes a final evaluation of the field experience.

Academic Advisor

The Academic Advisor would be one of the internal faculties from the institute who is eligible to be the project guide. The Academic Advisor advises and assists the student with the field experience site selection. Identifies and focuses coursework to prepare for the field experience, Academic advisor would review and approve the student 's Field Experience Plan, Communicates with Field Experience Supervisor, Reviews the required student reports, student log and evaluations.

Student Field Experience Plan

Students pursuing a Field Experience (FE) are required to complete an FE Plan in collaboration with their Academic Advisor and Field Supervisor. Planning for the FE should begin at least 4 months before its projected starting date. The plan begins with the students developing their objectives. The plan includes a goal, learning objectives, specific strategies and activities for accomplishing those goals, timeline for completing goals, and any other considerations that may impact their field experience, and methods of evaluating goal accomplishment (the deliverables). It is important that the student 's objectives, strategies, and evaluation methods are realistic, appropriate, meaningful, and measurable. Details of the student 's plan are developed and agreed to jointly by the student, field supervisor, and Academic Advisor. It represents the three-way agreement that is integral to field experience.

Revisions of Plan While in the Field

Revisions to the initial FE Plan should be agreed to and submitted to the Academic Advisor and FE supervisor no later than the end of the second week of the placement. The students who fail to register for their FE plan will have to work on the initial plan that was agreed. The FE Plan can be revisited and revised. If the FE moves in a different direction, the FE Plan can still be valid, but the student must document any revisions, the reasons for the revisions and the results. If the student is unsure about progress, he/she needs to talk with the Field Supervisor, Academic Advisor. Everyone on the team shares a common goal—to help the student have a successful learning experience.

Field Experience Site

The field experience site/organization or any place where the students intend to do their activity must be an approved site, and the field supervisor must be pee-approved and have at least a master's degree and one to two years of public health or relevant experience.

Report

During the placement/field experience/ project work Students are expected to keep a journal/ logbook recording of their activities submit a report based on their experience (format mentioned in project report above). The report should include:

- Description of activities performed during their field experience, along with any change or deviations from the FE Plans.
- What the students gained from the experience, identifying problems if they occurred.
- How many of their objectives were achieved.

Internship Report Format

- Cover page
- Internship certificate from Department
- Certificate from the organization
- Declaration
- Acknowledgment
- Executive summary
- Learning objectives
- Weekly activities
- Introduction
- Methods (Setting, oversight, timeline)
- Results (Skills learned, Work experience, challenges)
- Photographs
- Discussion and conclusion (Observations, insights, recommendations)
- References

6. Teaching - Learning Methods Course Wise

Teaching - Learning Methods	Courses
Experiential Learning	Internship/Block placement, Public Health Practicum, Biostatistics & Research methods in Public Health, Health informatics, Data science & epidemiology, Dissertation, Disaster and Emergency management
Integrated/ Inter disciplinary learning	Health system research for evidence-based policy & practice in public health, Health education & Health promotion, Introduction to Public Health, Social & Behavioral science in Public Health, Demography, Health informatics, Data science & epidemiology, Social & theoretical perspectives of Maternal Health, Emergency management
Participatory learning	Public Health Practicum, Internship/Block placement
Problem-solving methodologies	Epidemiological research, Infectious and Chronic diseases, Health system management & program planning, Developing Programmes & Policies for women & Children
Self-directed learning	Self-learning course SWAYAM/Coursera (MOOC)
Patient-centric and Evidence-based learning	Epidemiology, Bioethics, Epidemiology of major diseases, Women's Health, Analytical methods for epidemiology
The Humanities	Self-learning course SWAYAM/ Coursera (MOOC)
Project-based learning	Dissertation, Internship/Block placement
Role Play	Health education & Health promotion, Public Health Nutrition
Teamwork	Internship/Block placement, Public Health Practicum
Reflective writing	Dissertation, Public Health Nutrition

7. Scheme of Examination

i Evaluation of a course shall be done based on continuous internal assessment (CIA) mode followed by semester end university examination (SEE) for each course.

ii The components of CIA (Continuous Internal Assessment) may include sessional tests, Seminar/ Journal Club/ Case Studies /Assignment and other activities as determined by the board of studies in the Department of Public Health.

iii The CIA: SEE percentage is 50:50 and minimum marks for CIA shall be 50% and SEE shall be 50%. The pass marks per course shall be 50%.

iv There shall be examinations at the end of each semester ordinarily during February/March for odd semesters and August/September for even semesters.

v The SEE duration shall be 150min (2 hours 30min).

a. Internal Assessment

Internal assessment format

Distribution of Weightage for CIA [Continuous Internal Assessment (Weightage=50)]

Sl no	Type of Assessment	Weightage (%)
1	Average of two Internal tests	20
2	Continuous Comprehensive Assessment (CCA)	20
3	Assignment/Seminar/Case studies	10
Total		50

b. University Examination

Semester End Examination (SEE)

- University shall conduct SEE examinations in a year at an interval of not less than Four to Six months.
- The number of examiners for Theory and Viva voce shall be, comprising of One Internal and One External examiner appointed by the University.
- Each theory examination shall be evaluated by one internal and one external examiner. There shall be a third evaluation if there is any difference in marks given by internal and external examiner is more than 15%.
- Qualification and Teaching experience required for appointment as an examiner for Practical and Viva-voce shall be the same as that prescribed for Research Guide (i.e minimum 3 years).
- Theory papers will be evaluated by subject experts who are on the approved panel of examiners in Yenepoya (Deemed to be University). The question paper pattern for semester end examination is as follows.

Distribution of Weightage for Semester end examination (SEE: 50 marks)

Type of question	No. of questions	Marks for each question	Total	Duration
Long essays	02	15	30	150 min
Short essays	02	10	20	
Total			**50**	

Practical/Viva-voce examination

Sl No	Components	Marks
1	Spotters	10
2	Viva voce	20
3	Case study/case scenario	20
4	**Total**	**50**

Particulars of Practical, Viva-voce and Dissertation:

- Practical examination will be aimed at examination of public health skills and competence of the candidates for undertaking independent work as a public health expert/researcher.
- The Viva-Voce examination shall aim at assessing the depth of knowledge, logical reasoning, confidence & oral communication skills.
- Students will be given situations/case study/case scenario along with a set of questions related to it. The situations will be set from their courses. This will examine their analytical/problem solving skills.
- Special emphasis shall be given to dissertation work during the MPH- IV Semester examination.
- The marks of Viva-Voce examination shall be included in the practical examination to calculate the percentage and declaration of results.
- Practical examination shall be jointly conducted and evaluated by one internal examiner and one external examiner.

Evaluation and Certification of MOOC (SAWAYAM/NPTEL/Coursera):

The Yenepoya (Deemed to be) University incorporate the marks/grade obtained by the student, as communicated by the Host Institution through the PI of the SWAYAM/NPTEL/Coursera course in the marks sheet of the student that counts for final award of the degree by the University. The Yenepoya (Deemed to be University) will give the equivalent credit weightage to the students for the credits earned through online learning courses through the platform in the credit plan of the program.

In case a student fails to complete the SWAYAM/MOOC course, he/ she may be allowed to complete the course requirements as a supplementary candidate by registering for another course online in subsequent semester or opt for a course offered at Yenepoya (Deemed to be University).

Assessment of Dissertation:

A declaration by the candidate that the work was done by him/her shall be included. The project supervisor, Head of the Department and Head of the Institution shall certify the bonafide of the Project. Total 200 marks shall be awarded for the Dissertation and the marks distribution as follows:

- 100 marks- Dissertation evaluation by Internal and External examiners
- 100 marks- Internal Assessment. Marks distribution as follows:
  - ☑ 40 marks- Synopsis & Progress presentation
  - ☑ 50 marks- Evaluation of the dissertation by the Guide
  - ☑ 10 marks- Conference/Workshop/CME/Symposium/Seminar participation or presentation/ Publication in any peer reviewed journal (accepted/submitted)

Dissertation shall be evaluated by 2 examiners, one external & one Internal from the panel of examiners approved by the Board of Studies and by the University. The criteria for the evaluation shall be as prescribed by the Board of Studies. Acceptance of the dissertation is a pre-requisite for a candidate to be eligible to appear in the final examination. The written text of Dissertation should be neatly typed in double line spacing on one side of paper (A4 size) and should only be hard cover bound. A declaration by the candidate that the work was done by him/her shall be included. The co-guide (wherever applicable), guide, head of the department and head of the institution shall certify the bonafide of the dissertation. Two copies of the dissertation shall be submitted to the university through the proper channel along with a soft copy (CD), one month before the final examination. The maximum credits for the Dissertation/project work shall be 12 (equal to 200 marks). The total average of the marks by both internal and external examiner will be considered for final calculation. Ordinarily the viva voce will be conducted by a panel constituted by the Controller of Examination with an external and an internal examiner.

Guide: The teaching experience required for recognition of guide shall be as given under: A total of 3 years teaching/field experience after Master's Programme Or Ph.D. in Public Health or related subjects/M.D.in Community Medicine or equivalent as prescribed by the NMC/UGC. Or A total of 3 years teaching or field experience after a post graduate medical degree from an institution recognized by National Medical Council of India (NMC).

Student guide ratio: A recognized guide shall supervise dissertation work of not more than five students per academic year. Co-Guide may be included provided the work requires substantial contribution from other relevant department or from another institution recognized for teaching Yenepoya (Deemed to be University) or any other State level University.

Change of Guide: In the event of registered guide leaving the Institute/ College due to any reason or in the event of death of the guide or any other valid reasons, guide may be changed with prior permission from the University only.

Assessment of Internship/ Block placement:

Internship/Block placement in the fourth semester shall carry 12 Credits which will be awarded based on successful completion by the student in any designated setting. Assessment of Internship/Block placement will be conducted based on the attendance certificate, daily logbook, evaluation report and completion certificate issued by the authorized persons of the respective Institution/Organization/Industry. The student is required to produce consolidated report of Internship outlining Internship objectives. Upon receipt of these testimonials respective Faculty Supervisor will award credits and marks to students.

The Organization Head of the Department shall certify the bonafide of the Internship. Internship logbook and presentation shall be evaluated by 2 examiners, one external & one Internal from the panel of examiners approved by the Board of Studies and by the University.

Total 200 marks shall be awarded for the Internship and the marks distribution as follows:

- 100 marks- Internship evaluation by Internal and External examiners
- 100 marks- Internal Assessment. Marks distribution as follows:
  - ☑ 50 marks- Internship report/logbook
  - ☑ 50 marks- Presentation of the work done in the organization.

8. Eligibility to appear for University Examination

A candidate shall be eligible to appear for First semester University examination at the end of six months from the commencement of the course and for subsequent semester University examination at an interval of six months provided he/she has satisfactorily completed the prescribed course and fulfilled the minimum attendance requirement at the end of each semester.

9. Criteria for Pass

A candidate shall be declared to have passed the PG program if he/she secures at least CGPA of 5.0 (Course Grade P) in the aggregate of both Internal Assessment and Semester End Examination marks. The candidates who pass all the semester examinations in the first attempts in 2 years are eligible for ranks provided they secure at least a CGPA of 8.0 (at least Grade A).

The results of the candidates who have passed the fourth semester examination but not passed the lower semester examinations shall be declared as NCL (Not Completed Lower semester examinations). Such candidates shall be eligible for the degree only after completion of all the lower semester examinations. A candidate who passes the semester examinations in parts is eligible for only CGPA but not for ranking. A candidate who fails in any of the project work/project report/dissertation shall reappear for the same and pass the examination subsequently.

I. Carry over provision:

Carry over shall be allowed to the candidates up to all semesters.

II. Re-entry after Break of the study:

Candidates admitted to the program abstaining for more than 3 months must seek readmission in the appropriate semester. The candidate shall follow the syllabus currently approved/ is being followed for the program. All re-admissions of candidates are subject to the approval of the Yenepoya (Deemed to be University).

III. Maximum period for completion of the programme:

A candidate shall complete the four semesters (two years) programme within four years from the date of admission.

10. Declaration of Class

The results of successful candidates at the end of each semester shall be declared in terms of Grade Point Average (GPA). The results at the end of the fourth semester shall be classified based on the Cumulative Grade Point Average (CGPA) obtained in all the four semesters.

Letter Grades and Grade Points:

Cumulative Grade Point Average (CGPA):

The results at the end of the Fourth semester shall be classified on the basis of CGPA obtained in the four semesters and the corresponding overall Letter Grade. The Letter Grade as described below shall be adopted.

Letter Grade	Grade point	Range of Marks
O+(Outstanding)	10	90–100
O(Excellent)	9	80–89.99
A+(Very Good)	8	70–79.99
A(Good)	7	60–69.99
B+(Average)	6	55–59.99
P(Pass)	5	50–54.99
P(Pass)	<5	<50

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