

1.3.1. Institution integrates crosscutting issues relevant to Gender, Environment and Sustainability, Human Values, Health Determinants, Right to Health Issues, Emerging demographic changes and Professional Ethics in the curricula

Courses of the programs integrating crosscutting issues in the Curricula

Sl. No.	Courses relevant to	Page. No.	
1.	Gender	02	
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Crosscutting issues relevant to Gender in the Curriculum.

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Human Rights, Gender and Environmental Studies

(Total hours 30)

Goals This course is to familiarize the students with the key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions. The course familiarises the students with the rights of citizens in general and the marginalized groups in particular, and assess the institutional and policy measures which have been taken in response to the demands of various movements. Conceptual dimensions, international trends and the Indian experience form the contents of the course.

Objectives By the end of this course, a student will

Explain the rights of a citizen and various policies of gender equality

Define and state the importance of the concepts of Environmental Studies to address
complex environmental issues from a problem-oriented, interdisciplinary
perspective.

Course content

Unit 1 Understanding Social Inequality

Caste, Gender, Ethnicity and Class as distinct categories and their interconnection. Globalisation and its impact on workers, peasants, dalits, adivasis and women.

Unit 2 Human Rights

Human Rights: Various Meanings UN Declarations and Covenants Human Rights and Citizenship Rights

Human Rights and the Indian Constitution
Human Rights, Laws and Institutions in India: the role

Human Rights, Laws and Institutions in India; the role of the National Human Rights Commission.

Human Rights of Marginalized Groups: Dalits, Adivasis, Women, Minorities and Unorganized Workers.

Consumer Rights: The Consumer Protection Act and grievance redressal mechanisms. — Human Rights Movement in India.

Unit 3 Gender

Analysing Structures of Patriarchy Gender, Culture and History

Economic Development and The issue of Women's Political Participation and Representation in India

Laws, Institutions and Women's Rights in India

Women's Movements in India.

Unit 4 Environment

Environmental and Sustainable Development UN Environment Programme: Rio, Johannesburg and after. Issues of Industrial Pollution, Global Warming and threats to Bio – diversity Environment Policy in India Environmental Movement in India

Unit 5 Human Communities and the Environment

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Suggested Reading

'Indian Administration' by Avasti and Avasti

'Indian Administration' by Subhash Kashyap

'Indian Constitution' by D.D. Basu

'Indian Polity' by Lax mikanth

Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.

Gadgil, M., & Guha, R.1993. This Fissured Land an Ecological History of India. Univ. of California Press.

Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.

Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev.,

Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.

Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland Sinauer Associates, 2006.

Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339 36-•-37.

McCully, P. 1996. Rivers no more the environmental effects of dams (pp. 29-•-64). Zed Books

McNeill, John R. 2000. Something New Under the Sun An Environmental History of the Twentieth Century.

Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia Saunders.

Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.

Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.

Teaching learning Methodology

Lectures, PPT, videos, websites study of Government bodies regulating human rights and environmental policies, case studies, role play, street plays ,group discussions, presentations, debates, expert talks and online resources.

Visit to an area to document environmental assets river/ forest/ flora/fauna, etc.

Visit to a local polluted site--Urban/Rural/Industrial/Agricultural.

Study of common plants, insects, birds and basic principles of identification.

Study of simple ecosystems-e-pond, river etc.

Instructional methods and teaching methodology will be diverse and have a combination of lectures, active problem solving, demonstrations, group discussions and field visits.

The exhaustive list of methodologies is listed in point no.7. The instructor would provide a scheme of work that details specific teaching and learning strategies for each unit of the course.

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Examination Scheme/Assessment (Written)

	Marks
Internal Assessment	25
Final Examination	75
Total	100

Continuous Internal Assessment (CIA)

SN	Internal Assessment for 25 marks	Weightage
1	One Internal examination	15
2	Assignment/Seminars/Viva-voce/ Research Papers Presentation/Class Participation/Attitude	10
_	Total	25

Examination Scheme / Assessment Question Pattern for the internal exam will be as below

Section A	MCQ & Objective Questions	50 questions x 1 mark each	50 Marks
	Total		50 Marks

Examination Scheme / Assessment Question Pattern for the end semester exam will be asbelow

Section A	MCQ & Objective Questions	75 questions x 1 mark each	75 Marks
	Total		75 Marks

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HUMAN RIGHTS AND GENDER EQUITY

Course: AECC Number of Hours: 30 Hours

Credits: 02

Course Objectives:

• To make the student understand the human rights as citizens of India.

COURSE CONTENT:

Unit I: Human Rights

5 Hours

- Human Rights- Meaning
- Universal declaration of Human rights

Unit II: Human Rights Advocacy

5 Hours

- Global Advocacy of human rights amnesty international and other organizations
- Peoples union for Civil Liberty (PUCL)
- Human Rights Commission in India
- Minority Commission in India
- Remedies against Violation of Human rights in India

Unit III: Gender Equity (5 Hours)

 Key Concepts- Gender and sex- Masculinity and Feminity, Partriarchy- Matriarchy, Gender roles and attributes, Gender division or labour, Gender Bias, Gender Stereotypes, Need for Gender Sensitization.

Unit IV: Woman Status in India

5 Hours

• Important indicators- Six Ratio, Education, Health, Nutrition, Material and Infant Mortality, Work Participation rate, Political Participation

Unit V: Contemporary Women's Issues (5 Hours)

- Discrimination against Girl child
- Violence against women
- Problems of health and nutrition

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- Women's education gender bias in education
- Trafficking in Women
- Globalization and Impact on Women

Unit VI: State Initiatives on Gender Issues

5 Hours

- Constitutional Rights of Women
- Laws Pertaining to Women
- The National Commission for Women

Course Outcome:

• Basic Knowledge of Human Rights and its function and authorities in society and industry women's status, issues and gender equity.

Recommended Books:

- 1. Parvathy Appaiah, Human Rights, Gender Equity and Environmental Studies, Shivam Books publishers, 2012.
- 2. Parvathy Appaiah, Human Rights, Gender Equity and Environmental Studies, Jai Bharath Prakashan publishers, 2016.
- 3. ParvathyAppaiah,Human Rights, Gender Equity and Environmental Studies, Jai BharathPrakashan publishers, 2018-19.

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Crosscutting issues relevant to Environment and Sustainability in the Curriculum.

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Environmental Science

Theory: 2 Credits; Total Hours =30

Course content

Unit 1 Introduction to environmental studies

Multidisciplinary nature of environmental studies;

Scope and importance; Concept of sustainability and sustainable development.

Unit 2 Ecosystems

What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem:food chains, food webs and ecological succession. Case studies of the following ecosystems:

Forest ecosystem

Grassland ecosystem

Desert ecosystem

Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (6

lectures)

Unit 3 Natural Resources: Renewable and Non---renewable Resources

Land resources and landuse change; Land degradation, soil erosion and desertification.

Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.

Water: Use and over—exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter---state).

Energy resources: Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

Unit 4 Biodiversity and Conservation

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots

India as a mega---biodiversity nation; Endangered and endemic species of India

Threats to biodiversity: Habitat loss, poaching of wildlife, man---wildlife conflicts, biological

invasions; Conservation of biodiversity: In---situ and Ex---situ conservation of biodiversity.

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Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

Unit 5 Environmental Pollution

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise

pollution

Nuclear hazards and human health risks

Solid waste management: Control measures of urban and industrial waste.

Pollution case studies.

Unit 6 Environmental Policies & Practices

Climate change, global warming, ozone layer depletion, acid rain and impacts on human

communities and agriculture

Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity

(CBD).

Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

Unit 7 Human Communities and the Environment

Human population growth: Impacts on environment, human health and welfare.

Resettlement and rehabilitation of project affected persons; case studies.

Disaster management: floods, earthquake, cyclones and landslides.

Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.

Environmental ethics: Role of Indian and other religions and cultures in environmental

conservation.

Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

Unit 8 Field work

Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc. Visit

to a local polluted site—Urban/Rural/Industrial/Agoricultural.

Study of common plants, insects, birds and basic principles of identification.

Study of simple ecosystems---pond, river, Delhi Ridge, etc.

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SEMESTER-II Scheme and Courses

Course code	Type of Course	Course name	Hrs/ Week	Credits
AP02BS-201	Open Elective	Environment and Health	3	3
AP02BS-2C1	Core -Theory	Nanobiotechnology	4	4
AP02BS-2C2	Core - Theory	Stem cell and Developmental Biology	4	4
AP02BS-2C3	Core- Theory	Immunology	4	4
AP02BS-2C4	Core- Theory	Toxicology	3	3
AP02BS-2C5	Core -Practical	Nanobiotechnology and Toxicology	4	2
AP02BS-2C6	Core -Practical	Stem Cell and Developmental Biology	4	2
AP02BS-2C7	Core - Practical	Immunology	4	2
Total				24

Course Name: ENVIRONMENT AND HEALTH Credits: 3 (42 hours)

Course Code: AP02BS-201 (Open elective)

CO 1	To understand environment, biodiversity and natural resources
CO2 CO 3	To understand biodiversity, biogeochemical cycle, natural resources and impact of toxicants on health and environment. To know different types of air pollutants and associated health risks
CO4	To describe sources and types of water pollution, epidemiology, infectious diseases and water treatment technology

Unit 1: Fundamentals of Environmental Health

12 hrs

Global environmental change: an introduction, Health Risks of Biodiversity loss, Human impact on environment, Basic concept in Environmental Toxicology, Environmental pollution; solid waste and hazardous waste, Biogeochemical cycle and Health impacts, Environment-human interaction: Important environmental toxicants: Pesticides, Heavy metals, Organic pollutants, Endocrine disruptor, Carcinogenesis, mutagenesis and genotoxicity, Ionizing and Nonionizing Radiation. Environmental and biological indicators, Natural resources, conservation and sustainable development. Flouride and thoron toxicity, health impact

Unit 2: Air pollution and health

10 hrs

Chemical composition of Air: Classification of elements, Impact of air quality, aeroallergens and degraded air quality, respiratory diseases, Thermochemical and photochemical reactions in the atmosphere. Global warming and climate change, Stratospheric ozone depletion and Public Health, Photochemical smog. Air pollution, Climate change epidemiology: Problems and Challenges, Health exposures: weather, climate variability, Indoor and outdoor air pollution: Thermal extremes and their health impacts.

Unit 3: Water pollution and health

10 hrs

Types, sources and consequences of water pollution. Physico-chemical and Beteri togica I sampling and analysis of water quality. Water quality standards. Environmental Epidemiology, Infectious

diseases: Climate and Its Impacts on Vector-Borne and Zoonotic Diseases, Food security: Challenges of Climate Change to Food Security, Safiety, and Nutrition, Food- and water-borne diseases. Sources of marine pollution and control. Criteria employed for disposal of pollutants in marine system—coastal management. Biotechnological approaches and steps involved in conventional and advanced water treatment technology.

Unit 4: Land pollution and health

10 hrs

Physico-chemical and bacteriological assessment of soil quality, Soil pollution, Industrial waste effluents and heavy metals, their interactions with soil components. Different kinds of synthetic fertilizers and their interactions with different components of soil. Effects of mercury, lead, chromium, cadmium, arsenic and nitrate on human health. Radioactive pollution. Microbiological management of hazardous waste and wastelands, Biomagnification, Bio-degradation of different insecticides, fungicides and weedicides in soil. Environmental laws

Recommended books for reference

- 1. Koren H and Bisesi M. S (2011) Handbook of Environmental Health. (4th Ed.) CRC Press.
- 2. Spellman F. R and Bieber R. M. (2012) Environmental Health and Science Desk Reference. The Scarecrow Press, INC.
- 3. Robert Friis (2007) Essentials of environmental health. Jones and Bartlett Publishers.
- 4. Howard Frumkin (2016) Environmental Health: From Global to Local. (3rd Ed.) John Wiley & Sons
- 5. Koren H. (1980) Handbook of environmental health and safety: principles and practices. Pergamon Press Inc., New York.
- 6. Battersby S (2016) Clay's handbook of environmental health. Routledge.
- 7. Brunner R. C (1989) Hazardous Waste Incineration. McGraw Hill Inc.
- 8. Trivedi R. K(2010) Handbook of Environmental Laws, Rules Guidelines, Compliances and Stadards, Vol I and II. Enviro Media (R).

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Crosscutting issues relevant to Human Values in the Curriculum

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SOCIOLOGY

Placement: Second Year

Theory-60hrs

COURSE DESCRIPTION

This course is to reorient students to sociology related to community and social institution in India and its relationship with health, illness and nursing.

Unit	Hours	Learning Objectives	Content	Teaching Learn- ing Activities	Assessment Methods
Ι	4	Discuss the sociological concepts that are applicable to nursing	 Introduction Importance of study of sociology in nursing, relationship of anthropology, sociology etc Role of social factors in health and disease 	Lecture cum discussion	• Unittest
П	5	Describe the interrela- tionship of individual in society	 Individual and the society Socialization Interdependence of individual and society. Personal disorganisation. 	Lecture cum discussion	MCQtestAssignment
Ш	5	Describe the influence of culture onhealth and disease	 Culture Nature of culture Evolution of culture Diversity and uniformity of culture Influence on health and disease 	Lecture cum discussionPanel discussion	• MCQtest
IV	15	Identify various social groups and their interactions	 Social organisation Social groups, crowds and public groups, nations, race. Social institutions: the family marriage, education, religion, arts, economic organization, political organisation. The urban & rural community in India: ecology, characteristics of the village, characteristics of the town and city. Social satisfaction: class and caste. 	Lecture cum discussion	MCQtestAssignment
V	10	Discuss on social process and social control.	Social process and social control Process of social interaction: competition, conflict-war, cooperation, accommodation and assimilation. Nature and process of social control, norms and values, folk ways, customs, law and fashion.	Lecture cum discussion	• MCQtest



Unit	Hours	Learning Objectives	Content	Teaching Learn- ing Activities	Assessment Methods
VI	6	Explain the process of social change	 Social change Nature and process of social change: Factors influencing cultural change. Cultural lag. Role of nurse—change agents. 	Lecture cum discussion	MCQtest
VII	15	Describe the role of nurse in dealing with social problems in India	 Social problems Social disorganisation, control and planning, poverty, population, housing, illiteracy, food supplies, growth of urbanisation, prostitution, minority groups, right of women and children, child labour, child abuse, delinquency and crime, substance abuse. Social welfare programmes in India. 	Lecture cum discussionSeminar	• Unittest

References:

- 1. VidyaB,Sachdeva.Introduction to sociology, 47 ed.Kitab mahal; 2015.
- 2. Clement I.sociology for nurses,2 ed.India:Pearson education;2014.
- 3. Neera ja KP.textbook of sociolo oy,2 ed.Jaypee brothers;2018.
- 4. Ganesh P.textbook of sociology for BSc nursing, EMMESS medical publishers;2018.

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NURSING FOUNDATION

Placement-First Year

Theory - 45 hours

Course Description

This course will help students to develop an understanding of the philosophy, objectives and responsibilities of Nursing as a profiession. The purpose of the course is to orient one to the current concepts involved in the practices of nursing and developments in the Nursing profession

Unit	Ho		Learning Objectives	Content	Teaching Learn- ing Activities	Assessment Methods
I	Th. 5	Prc	 Identify the professional aspects of nursing Explain the current trends in health and Nursing Describe the values, code of ethics& professional conduct for nurses of India 	Introduction Development of nursing as a profession Its philosophy Objectives and responsibilities of a graduate nurse Trends influencing nursing practice Expanded role of the nurse Development of nursing education in India and trends in nursing education Professional organizations, career planning Code of ethics & professional conduct for nurses.	 Lecture cum discussion Case discussion Role plays 	 Essay type Short answer Objective type questions
Ш	8		 Describe the ethical and legal responsibilities of a professional nurse Describe the concept of health and illness Explain the developmental stages of individual. 	 Nursing as a profession Ethical, legal and other, issues in nursing Concept of health and illness, effects on the person Stress and adaptation Health care concept and Nursing care concept Developmental concept, needs, roles and problems of the developmental stages of individual - newborn, infant, toddlers, preadolescent, adulthood, middle age, Old age. 	 Lecture cum discussion Case discussion Supervised clinical practice 	 Essay type Short answer Objective type questions
Ш	6		Explain the basic concepts of conceptual and theoretical models of nursing.	Professional Nursing care concepts and practices Theory of nursing practice Metaparadigm of nursing - characterised by four central concepts, i.e.	Lecture cum discussion	Essay, typeShort answer



Unit	Hours		Confent		Teaching Learn-	Assessment	
	Th.	Pr.	Objectives	Nurse, person (Client/ patient) health and environment. Florence Nightingale theory Orem's theory General system theory	ing Activities	Objective type questions	
IV	10		 Explain the steps of nursing process. Document nursing process as per the format 	The Nursing process Assessment: Tools for Assessment, Methods, Recording Nursing diagnosis Types and significance Planning: Teaching for planning care, types of care plans Implementation: Different approaches to care, organizations and implementation of care, recording Evaluation: Tools for evaluation, process of evaluation types of evaluation	 Lecture discussion Exercise Supervised clinical practice 	 Essaytype Short Objective type questions Assessment of skills with check list 	
V	7		 Appreciate the significance of quality assurance in nursing Explain the nursing practice standards. 	 Nursing practice standards Quality assurance nursing standards, nursing audit, total quality management Role of council and professional bodies in maintenance of standards 	Lecture cum discussionDemonstration	Essa ytypeShort answerObjective type questions	
VI	6		Explain the role of nurse in various levels of health services.	Nursing services in the hospital & community Primary health care concept Community oriented nursing Holistic nursing Primary nursing Family oriented nursing concept Problem oriented nursing Progressive patient care Team nursing	 Lecture cum discussion Explain using charts 	 Essa y type Short answer Objective type questions 	
VII	3		Describe the principles and techniques for bio-medical waste management in supervised clinical settings	Management of Bio-medical waste in clinical settings Biomedical waste management Waste sharps Solid wastes Discarded medicines Cytotoxic drugs	Lecture cum discussion	 Essaytype Short Short Objective type questions 	



Crosscutting issues relevant to Health Determinants and Right to Health Issues in the Curriculum

MD Community Medicine	Link
MDS Public Health Dentistry	Link

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CLINICAL SPECIALITY - I

COMMUNITY HEALTH NURSING

Placement: IYear

Hours of Instruction

Theory: 150 Practical: 660

Total: 810

Course Description

The course is designed to assist students in developing expertise and in-depth understanding in the field of Community Health Nursing. It would help students to appreciate holistic life style of individuals, families & groups and develop skills to function as Community Health Nurse specialist/practitioner. It would further enable student to function as an educator, manager and researcher in the field of Community Health Nursing.

Objectives

At the end of the course the student will be able to,

- 1. appreciate the history and development in the field of Community Health and Community Health Nursing
- 2. appreciate role of individuals and families in promoting health of the Community
- 3. perform physical, developmental and nutritional assessment of individuals, families and groups
- 4. apply the concepts of promotive, preventive, curative and rehabilitative aspects of health while providing care to the people
- 5. apply nursing process approach while providing care to individuals, families, groups and community
- 6. integrate the concepts of family centered nursing approach while providing care to the community
- 7. recognize and participate in the management of emergencies, epidemics and disasters
- 8. apply recent technologies and care modalities while delivering community health nursing care
- 9. appreciate legal and ethical issues pertaining to community health nursing care
- 10. conduct community health nursing care projects
- 11. participate in planning, implementation and evaluation of various national health and family welfare programmes at local, state and the national level
- 12. incorporate evidence based nursing practice and identify the areas of research in the community settings
- 13. participate effectively as a member of Community Health team
- 14. coordinate and collaborate with various agencies operating in the community by using inter-sectoral approach
- 15. teach community health nursing to undergraduates, in-service nurses and the community health workers
- 16. demonstrate leadership and managerial abilities in community health nursing practice

Units	Hours	Course Content		
I	10	Introduction		
		Historical development of community health and community health nursing- world and India, various health and family welfare committees		
		 Current status, trends and challenges of community health nursing Health status of the community-community diagnosis Scope of community health nursing practice Ethical and legal issues Socio-cultural issues in community health nursing National Policies, plans and programmes National health policy 		

Units	Hours	Content
		 National population policy (2000, 2002 & 2017) National health and welfare programmes National health goals/ indicators/ Millennium Developmental Goals (MDG)/ Strate ries Sustainable Development Goals Planning process: Five year plans National rural health mission
π	10	Health Concepts, issues Determinants Measurements Health economics Health technology Genetics and health Waste disposal Ecosystem
ш	15	Population dynamics and control Demography Transition and theories of population National population policy National population programmes Population control and related programmes Methods of family limiting and spacing Research, census, national family health survey
IV	30	 Community health nursing Philosophy, aims, objectives, concepts, scope, principles, functions Community health nursing theories and models Quality assurance: community health nursing standards, competencies, monitoring community health nursing audits Family nursing and family centered nursing approach Family health nursing process Family health assessment Diagnosis Planning Intervention Evaluation Nursing care for special groups: children, adolescents, adults, women, elderly, physically and mentally challenged- urban and rural population at large Community nutrition Concept, role and responsibilities of community health Nurse practitioners/nurse midwifery practitioners-decision making skills, professionalism, legal issues
V	45	Maternal and neonatal care Integrated Management of neonatal and Childhood Illness (IMNCI): • Introduction to common childhood diseases

Units	Hours	Course Content				
		 Integrated evidence-based syndromic approach to manage sick child Components of integrated approach The principles of integrated care Integrated case management process at home, referral centre and at out patient service (OP) Clinical assessment for selected conditions Jaundice, diarrhea, measles, feeding problems, malnutrition, fever, caugh, difficulty in breathing, pneumonia, anemia and ear problem Counselling a mother or a caretaker for the selected conditions Skilled Birth Attendant (SBA) module Management of normal pregnancey, labour and postpartum period Management of obstetric complications Ensuring the quality care through community involvement and counseling 				
VI	10	 Disaster nursing (INC module on reaching out : Nursing care in emergencies) Introduction Types and levels of disaster Disaster mitigation Phases of disaster management Disaster management plans and activation of disaster management plan Disater management of community- nurses role Capacity building programme for community volunteers, health care professionals. Disaster management committees 				
VII	10	Information, education and communication IEC/BCC: Principles and strategies Communication skills Management information and evaluation system: Records and reports Informationtechnology Tele-medicine and tele-nursing Journalism Massmedia Folkmedia				
VIII	15	 Health care delivery system: Urban, rural, tribal and difficult areas Health organization: national, state, district, CHC, PHC, sub centre, village - Functions, staffing, pattern of assistance, layout, drugs, equipment and supplies, roles and responsibilities of DPHNO Critical review of functioning of various levels, evaluation studies, recommendations and nursing perspectives Alternative systems of medicine Alternate systems for health promotion and management of health problems Training and supervision of health workers Health agencies: NGO's, roles and functions Inter-sectoral coordination Public private partnership Panchayat raj institutions Challenges of health care delivery system 				

Practical

Total= 660 Hours
1 Week= 30 Hours

S. No.	Dept. / Unit	No. of Week	Total Hours
1	Sub-centre, PHC, CHC	12	360
2	District family welfare bureau	1	30
3	Urban centers	6	180
4	Field visits	3	90
	Total	22	660

Student Activities

- Identification of community leaders and resource persons (community mapping)
- Community health survey
- Community health nursing process- individual, family and special groups and community
- Counseling
- Health education campaign, exhibition, folk media, preparation of IEC materials
- Organizing and participating in special clinics/camps and national health and welfare programmes-Organize atleast one health and family welfare mela/fair (all stalls of national health and family welfare activities should be included)
- Estimation of Vitalhealth statistics -Exercise
- Drill for disaster preparedness
- Organize atleast one in-service education to ANM's/LHV/PHN/HW
- Nutrition–Exercise on nutritional assessment on dietary planning, demonstration and education for various age groups
- Filling up of Records, reports and registers maintained at SC/PHC/CHC
- Assist women in self-breast examination
- Conduct antenatal examination
- Conduct vaginal examination
- Conduct deliveries
- Post natal visits
- Perform Episiotomy and suturing
- Prepare Pap smear
- Conduct Insertion/Removal of IUD
- Blood Slide preparation
- Field visits
- Maintenance of log book for various activities

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PAPER 104- HEALTH EDUCATION AND HEALTH PROMOTION

> COURSEDESCRIPTION:

- This course health education and health promotion introduces students to basics of health education and health promotion pertaining to public health practice.

> OBJECTIVES:

- At the conclusion of the course, the student will be able to:
- Develop managerial skills in facilitative change in ways and conditions of health and promote health of people

> **CONTENTS**:

1. Health education

- Definition, objectives, principles, contents
- Application, methods, approaches, Tools.
- Health education Vs propaganda,
- Adoption process Roger's model application.

2. Health communication

- Introduction
- Principles
- Process
- Application in health
- Models of communication
- Elements of communication
- Factors influencing communication
- Barriers of communication

3. Channels of health communication

- Traditional
- Modern
- Individual



- Group
- Mass
- Target groups

4. Communication techniques and strategies.

5. Health Promotion

- Overview of concepts of health promotion
- The Ottawa Charter-1986
- Models of health promotion (Biomedical model, behavioral model, socioenvironmental model.
- Major theories in health promotion (Behavioral change theories: Health Belief Model, Stages of change theory, social learning theories. Community change theory: diffusion of innovations
- Developing health promotion strategies in community &hospitals
- Role of professional health educator in health promotion

6. Propagation of healthy lifestyle

- Emerging lifestyle diseases
- Women's health in the context of changing socio-economic pattern in India
- Current health related messages

7. Role of media in health promotion

- Mass media
- Inter personal communication
- Role of communication in promoting healthy lifestyle
- Cost effective health promotion strategies
- Role of corporate in health promotion
- Role of internet viz. email, web portals etc. in health promotion o Role of government and private sector in health promotion



> PRACTICUM:

- Writing Health Messages
- Handling Communication Aids
- Developing Communication Campaigns PLA, FGD, Counseling
- Health education activities in schools, and community
- Health promotion activities

> REFERENCE:

- Ramachandran & Dharmalingam: Health education a new approach,
 Vikas publishing
- Park K, Park's Textbook of preventive and social medicine, M/s Banarasidas, Jabalpur
- Baner ji D, Poverty, class and health promotion and protection WHO, Copenhagen
- Health education: creating strategies for school and community health By Glen Gordon Gilbert, Robin G.Sawyer
- Kari S,Lankinen et al: Health and diseases in developing countries, Mac Milan, Press, London
- David Morelyi: Practicing Health for all, Oxford university press, London
- Baner ji D: Health and family planning services in India, Lok Prakash, New Delhi
- WHO: Intersectoral Linkages and health development
- World Bank: World Bank Development report, Washington
- Green A: An Introduction to health planning in developing countries, Oxford University Press
- Anita N I I: People health in people hands, the foundation for research in community health
- Ebrahim G M: Primary health care —re-orientation organizational support, Mac Millan, London.



Management (NDMA)- Management of Natural Disaster: Food, Earth quake, Drought, Cyclone, Tsunami – Epidemics: Cholera, Plague, Typhoid, Jaundice – Management of epidemics.

Unit 6 - 10 hours

Management of disaster — Prevention — Method Precautions — Ambulance management - Role of Hospitals, Community, Voluntary agencies and Government in disaster management, Organization of medical camps.

BOOKS TO BE REFERRED:

- 1. Shahunth and Panekar V.First Aid, Vora Publication
- 2. First Aid Manual: Accident and Emergency, Vora Medical Publn.
- 3. Park K. Preventive and Social Medicine
- 4. Park K. Text Book on Hygiene and Preventive Medicine, Banarsidas Bhanot.

HEALTHCARE LAWS AND ETHICS

Unit— 1 - 1 0 hours

General Law of Contract: Essentials of a Contract – Offer and acceptance – Capacity of Parties - Free Consent – Consideration and legality of object – Void argument and Contingent Contract – Law of Tort.

Unit -2 - 10 hours

Medical ethics —basic issues, importance, process of developing and implementing ethics and values in an institution —codes of conduct: Hippocrates oath and declaration of Geneva—MCI regulation—professional conduct, etiquette and ethics, Euthanasia (mercy killing).

Unit-3-10 hours

Transplantation of Human Organs Act 1994—Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994. Central Births and Deaths Registration Act 1969—Medical Termination of Pregnancy Act 1971.

Unit - 4 - 10 hours

Drugs and Cosmetics Act. 1948 – Pharmacy Act. 1948 – Poison Act 1919 – Drugs and Magic Remedies (Objectionable Advertisement) Act, 1954 – Dying Declaration.

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Unit-5-10 hours

Employees Provident Fund Act. 1952 – Payment of Gratuity Act, 1972 – Minimum Wages Act. 1948–Payment of Wages Act. 1916, Maternity Benefit Act. 1961.

Unit-6-15 hours

Workmen Compensation Act, 1923 – Industrial Employment (Standing Order) Act – Trade Union Act – Industrial Disputes Act – Importance provisions.

Unit-7-15 hours

Consumer Protection Act, 1986 - Application of C.P Act in Hospital – Recent judgment of Supreme Court – Implication for Health Professionals. – Medical Negligence Act.

REFERENCE BOOKS:

- 1. Kapoor N.D. Industrial Laws
- 2. Bare Acts.

S P 5 ENVIRONMENT & ECOLOGY

- -Students will be able to learn about environment, factors affecting it, environmental ethics and its protection
- students will be able to \square Describe a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Students will be able to Critically analyze technical subject matter (written or oral) for scientific merit apply learned environmental knowledge and understanding to solve technical /research problems in new contexts

UNIT-1

- 1.1. General Meaning of Environment
- 1.2. relevance of the subject Environment
- 1.3. Ecology for Hospital Administrators.

UNIT-2

- 2.1. Brief outline of the Environment (Protection) Act 1986 & its importance for Hospital Administration.
- 2.2. Legislation vs. Social obligation of Hospitals.
- 2.3. Role of NGO's like green peace in Environmental protection.

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UNIT-3

- 3.1. Ecology & Brief outline on Elements of Ecology;
- 3.2. brief discussion on Ecological balance and consequences of change,
- 3.3. principles of environmental impact assessment.
- 3.4. Environmental Impact Assessment report (EIA).

UNIT-4

- 4.1. Air Pollution and Control
- 4.2. Factors responsible for causing Air Pollution in Hospitals.
- 4.3. Sources & effects of Air pollutants in the Hospital context.
- 4.4. Primary & Secondary pollutants, Green House Effect, Depletion of Ozone Layer.
- 4.5. Brief discussion on THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT,1989.

UNIT - 5

- 5.1. Water Pollution and Control -
- 5.2. Brief Discussion on Hydrosphere, natural water, pollutants: their origin and effects, river/lake/ground water pollution,
- 5.3. The financial implication of water pollution control and steps required to be taken
- e.g. Sewerage treatment plant, water treatment plant.
- 5.4. Standards and control inrelation to the effect of legislation by Central and State Boards for prevention and control of Water Pollution.

UNIT-6

- 6.1. Land Pollution
- 6.2. Brief understanding of lithosphere –
- 6.3. Pollutants -muncicipal,industrial,commercial,agricultural,hospital,hazardous solid waste); their original effects, collection and disposal of solid waste,
- 6.4. recovery & conversion methods in relation to an hospital enterprise with discussion about the financial implication.

UNIT - 7

- 7.1. Noise Pollution:
- 7.2. Sources, effects, standards & control

Books:

- 1. Environmental Science, Cunningham, TMH
- 2. Environmental Studies, A.K.De & A.K.De, New Age International
- 3. Environmental Pollution Control Engineering, C.S.Rao, New Age International
- 4. Environmental Management, N.K. Oberoi, EXCEL BOOKS
- 5. Text Book of Environmental Studies for under gradute courses By Erach Bharucha Reprinted in 2006, Orient Longman Private Limited /Universities Press India Pvt. Ltd.



Crosscutting issues relevant to Right to Health Issue in the Curriculum



INTRODUCTION TO NATIONAL HEALTHCARE DELIVERY SYSTEM IN INDIA

Course Description: The course provides the students a basic insight into the main features of Indian health care delivery system and how it compares with the other systems of the world

First Semeste	r (0-6 months)							
Course code &Title				Hours			Weekly	
					Theory	Theory Practical Total	Total	class hours
Foundation course - Internal examination								
AP01PT 1S	- Introduction	to	Healthcare	Delivery	30	-	30	2
System in Ind	a							

- 1. Introduction to healthcare delivery system
 - a. Healthcare delivery system in India at primary, secondary and tertiary care
 - b. Community participation in healthcare delivery system
 - c. Health system in developed countries.
 - d. Private Sector
 - e. National Health Mission
 - f. National Health Policy
 - g. Issues in Health Care Delivery System in India
- 2. National Health Programme- Background objectives, action plan, targets, operations, achievements and constraints in various National Health Programme.
- 3. Introduction to AYUSH system of medicine
 - a. Introduction to Ayurveda.
 - b. Yoga and Naturopathy
 - c. Unani
 - d. Siddha
 - e. Homeopathy
 - f. Need for integration of various system of medicine
- 4. Health scenario of India- past, present and future
- 5. Demography & Vital Statistics
 - a. Demography-its concept
 - b. Vital events of life & its impact on demography
 - c. Significance and recording of vital statistics
 - d. Census & its impact on health policy
- 6. Epidemiology
 - a. Principles of Epidemiology
 - b. Natural History of disease



- c. Methods of Epidemiological studies
- d. Epidemiology of communicable & non-communicable diseases, disease transmission, host defense immunizing agents, cold chain, immunization, disease monitoring and surveillance.

References

GOI. Twelfth five-year plan (2012-2017) social sector, Volume III. Planning commission government of India.pl- 47

MOHFW. Rural health care system in India- the structure and current scenario. Rural health statistics 2011.

Indian Public Health Standards (IPHS) guideline for community health centers, Revised 2012. DGHS, MOHFW, GOI. 1-94

Park K. Park's Textbook of Preventive and Social Medicine. 21st ed. Prem Nagar, Jabalpur, (M.P.), India: M/s Banarsidas Bhanot; 2011

BASIC COMPUTERS AND INFORMATION SCIENCE

Course Description: The course has focus on computer organization, computer operating system and software, and MS windows, Word processing, Excel data worksheet and PowerPoint presentation.

Course code &Title	Hours		Weekly	class	
	Theory	Practical	Total	hours	
Foundation course - Internal examination					
AP01PT 1S2- Basic computer and information science	15	30	45	3	

- 1. Introduction to computer: Introduction, characteristics of computer, block diagram of computer, generations of computer, computer languages.
- 2. Input output devices: Input devices(keyboard, point and draw devices, data scanning devices, digitizer, electronic card reader, voice recognition devices, vision-input devices), output devices(monitors, pointers, plotters, screen image projector, voice response systems).
- 3. Processor and memory: The Central Processing Unit (CPU), main memory.
- 4. Storage Devices: Sequential and direct access devices, magnetic tape, magnetic disk, optical disk, mass storage devices.
- 5. Introduction of windows: History, features, desktop, taskbar, icons on the desktop, operation with folder, creating shortcuts, operation with windows (opening, closing, moving, resizing, minimizing and maximizing, etc.).
- Introduction to MS-Word: introduction, components of a word window, creating, opening
 and inserting files, editing a document file, page setting and formatting the text, saving the
 document, spell checking, printing the document file, creating and editing of table, mail
 merge.
- 7. Introduction to Excel: introduction, about worksheet, entering information, saving workbooks and formatting, printing the worksheet, creating graphs.

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- 1. Demonstrate the technique of measuring ROM using goniometry
- 2. Demonstrate muscle strength using the principles and technique of MMT
- 3. Demonstrate the techniques for muscle strengthening based on MMT grading
- 4. Demonstrate the techniques of massage manipulations
- 5. Demonstrate to apply the technique of passive movements
- 6. Demonstrate various techniques of Active movements
- 7. Demonstrate techniques of strengthening muscles using resisted exercises
- 8. Demonstrate techniques for measuring limb length and body circumference.
- 9. Demonstrate breathing exercises
- 10. Demonstrate techniques of Aquatic exercises

INTRODUCTION TO QUALITY AND PATIENT SAFETY

Course description: This course is to help students understand the basic concepts of quality in health Care and develop skills to implement sustainable quality assurance program in the health system. The course includes teaching NABH guidelines, Basic Life Support, management of biomedical waste, infection control & prevention, antibiotic resistance and disaster management.

Course code &Titles		Hours			
	Theory	Practical	Total	class hours	
Foundation course – Internal examination					
AP01PT 3S1- Introduction to quality and patient safety (Including Emergency care, BLS, Biomedical waste management, Infection prevention and control, etc)	20	30	50	3	

1. Quality assurance and management - The objective of the course is to help students

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understand the basic concepts of quality in health Care and develop skills to implement sustainable quality assurance program in the health system.

- a. Concepts of Quality of Care
- b. Quality Improvement Approaches
- c. Standards and Norms
- d. Quality Improvement Tools
- e. Introduction to NABH guidelines
- 2. Basics of emergency care and life support skills Basic life support (BLS) is the foundation for saving lives following cardiac arrest. Fundamental aspects of BLS include immediate recognition of sudden cardiac arrest (SCA) and activation of the emergency response system, early cardiopulmonary resuscitation (CPR), and rapid defibrillation with an automated external defibrillator (AED). Initial recognition and response to heart attack and stroke are also considered part of BLS. The student is also expected to learn about basic emergency care including first aid and triage. Topics to be covered under the course are as follows:
 - a. Vital signs and primary assessment
 - b. Basic emergency care first aid and triage
 - c. Ventilations including use of bag-valve-masks (BVMs)
 - d. Choking, rescue breathing methods
 - e. One- and Two-rescuer CPR
 - f. Using an AED (Automated external defibrillator).
 - g. Managing an emergency including moving a patient

At the end of this topic, focus should be to teach the students to perform the maneuvers in simulation lab and to test their skills with focus on airways management and chest compressions. At the end of the foundation course, each student should be able to perform and execute/operate on the above-mentioned modalities.

- 3. Bio medical waste management and environment safety- The aim of this section will be to help prevent harm to workers, property, the environment and the general public. Topics to be covered under the course are as follows:
 - a. Definition of Biomedical Waste
 - b. Waste minimization
 - c. BMW Segregation, collection, transportation, treatment and disposal (including color coding)
 - d. Liquid BMW, Radioactive waste, Metals/ Chemicals / Drug waste
 - e. BMW Management & methods of disinfection
 - f. Modern technology for handling BMW
 - g. Use of Personal protective equipment (PPE)
 - h. Monitoring & controlling of cross infection (Protective devices)
- 4. Infection prevention and control The objective of this section will be to provide a broad understanding of the core course areas of infection prevention and control and to equip



AHPs with the fundamental skills required to reduce the incidence of hospital acquired infections and improve health outcomes. Concepts taught should include –

- a. Evidence-based infection control principles and practices [such as sterilization, disinfection, effective hand hygiene and use of Personal protective equipment (PPE)],
- b. Prevention & control of common healthcare associated infections,
- c. Components of an effective infection control program, and
- d. Guidelines (NABH and JCI) for Hospital Infection Control
- 5. Antibiotic Resistance
 - a. History of Antibiotics
 - b. How Resistance Happens and Spreads
 - c. Types of resistance- Intrinsic, Acquired, Passive
 - d. Trends in Drug Resistance
 - e. Actions to Fight Resistance
 - f. Bacterial persistence
 - g. Antibiotic sensitivity
 - h. Consequences of antibiotic resistance
 - i. Antimicrobial Stewardship- Barriers and opportunities, Tools and models in hospitals
- 6. Disaster preparedness and management- The objective of this section will be to provide knowledge on the principles of on-site disaster management. Concepts to be taught should include
 - a. Fundamentals of emergency management,
 - b. Psychological impact management,
 - c. Resource management,
 - d. Preparedness and risk reduction,
 - e. Key response functions (including public health, logistics and governance, recovery, rehabilitation and reconstruction), information management, incident command and institutional mechanisms.

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Crosscutting issues relevant to Emerging Demographic Changes in the Curriculum

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MSc Biostatistics

Unit IV: Factorial designs 2^{ln} designs, illustration, main effects, interaction effects, and analysis. 3^2 design, illustrations, main effects, interaction effects and analyses. Complete and Partial confounding in 2^n designs in RBD and analyses.

(12 hours)

Unit V: Fractional factorial designs, orthogonal and balanced arrays and their connection with confounded and fractional factorial. Split plot and split block experiments. Response surface experiments, first order design and orthogonal design. Experiments with mixture models, design and analyses.

(06 hours)

References:

- 1. Cochran W G and Cox GM, Experimental designs. John Wiley; 1992
- 2. Cochran W G, Sampling Technique. 3rd Edition. Wiley Eastern; 1989
- 3. Das, M N and Giri N C, Design and Analysis of Experiments. New Delhi :Wiley Eastern Limited; 1979
- 4. Daniel WW, Biostatistics. A foundation for analysis in the health sciences. John wiley; 2005
- 5. Montgomery D C, Design and Analysis of Experiments. Wiley India 5th Edition;2006
- 6. Khuri A and Cornell M, Response Surface methodology. Marcel Dekker; 1996
- 7. Mukhopadhyay P, Theory and Methods of Survey Sampling. Prentice-Hall of India; 1998
- 8. Sukhatme et.al, Sampling Theory of Surveys with Applications. Indian Society of Agricultural Statistics. New Delhi; 1984
- 9. Swain AKPC, Finite Population sampling- Theory and Methods. New Delhi: South Asian Publishers; 2003
- Ranjan K Som, Practical Sampling Techniques. 2nd edition. CRC publication.
 ISBN:
 9780824796761;1995
- 11. Zar J H, Biostatistical Analyses. Pearson; 2010

Hard Core	FS02BT-2C2: Epidemiology	No. of credits: 4 (56L+28P)
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Learning Objectives: To acquaint the students with

- Foundation on basics epidemiological study designs.
- Different study designs, selection of appropriate research design.
- Analysis and interpretation of results from Epidemiological studies.

Dr.Gangadh ara Somayaji K.S. Registrair Yen epicya Desmed to be University) University Road, Deralabatte Mangalore-575 018, Karnataka Learning outcome: At the end of the Course the student will be able

- Understand and interpret various concepts under Epidemiological study.
- Translate the research objectives into clear, testable statistical hypothesis.
- Identify appropriate Epidemiological study design for the research problem and carryout the Statistical Analysis.

Unit-I: Research methodology: Definition, meaning and objectives of research, need and importance of epidemiological research in public health. Types of research. Good research criteria, formulation of research question and its key considerations, formulation of hypothesis, need and importance of review of literature, steps in formulating a good research proposal.

Ethics in Research: Orientation to Institutional Ethics committee, importance of ethics in research, ICMR ethical guidelines, Ethical and professional issues related to data security and publication.

Fundamentals of Intellectual Property Rights (IPR): What are patents and inventions? Key differences - Invention and discovery - Understanding inventorship, ownership and rights in the context of collaborative research- Novelty, inventive step and industrial applicability - Introduction to patent specifications - Content of provisional and complete specifications. - Conduct search (novelty and inventive steps) - Conduct prior art with keywords - Booleans operators - Use of parenthesis - Patent description writing - Patent claims writing - Precautions of writing the specifications. Patent specifications and filing procedure

(14 hours)

Unit II: Measures in Epidemiology: Definition of Epidemiology, Historical developments in epidemiology, John snow's study and Doll Hill study, epidemiological triad, emergence of modern epidemiology, role of epidemiology in health science, classification of diseases, measures of disease frequency, rate ratio and proportion, prevalence and incident rate, rate risk and ratio, point & period prevalence, relation between prevalence and incidence, measures of exposures and outcomes, types of exposure and outcome, sources of exposures, measures of morbidity and mortality rate, Cumulative rate and risk, person years, age specific incidence rates, case fatality rate, measures of a disease and exposure, standardization of rates: Concept, direct and indirect methods and introduction to confounding.

Validity and reliability of measures of exposure and outcome, basic concepts of surveillance and levels of prevention —Primary, secondary and tertiary. Screening- definition and requirements, biases, sensitivity and specificity, positive predictive, negative predictive test results, likelihood ratio positive and negative, ROC analysis.

(15 hours)

Unit III: Observational studies: Concept and objectives of observational studies, explorative, descriptive and analytical designs, study design and their importance, advantages and disadvantages; descriptive study designs. Case report, Case study, case series, cross sectional study, Strengths and limitations of different study designs.

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Unit IV: Analytical study designs: Case Control: Definition and selection of cases and controls, measuring exposure, Odds ratio (OR), Confidence interval for OR, Attributable Risk and Population attributable Risk, Interpretation of results, advantages and disadvantages of case control studies, advantages and disadvantages of population based case control studies over hospital based. Nested case control study. Matched case control studies, analysis, advantages and disadvantages of matching, Ecological study.

Cohort studies: Choice of study population, definition of cohort, choice of comparison group, measurement of exposure, outcomes, Relative Risk(RR), rate difference, confidence interval for RR, interpretation of RR, Case cohort studies and historical cohort studies. Advantages and disadvantages of prospective, historical cohort study.

(14 hours)

Unit V: Dealing with Confounding variables: various methods of dealing with confounding, concept of matching, propensity score matching, restricted sampling. Introduction to stratification, Mantel Haenszel summary measures, MH Odds ratio, MH risk ratio, MH confidence interval for OR and RR. Interaction, relative and absolute measures, attributable risk, attribute risk percentage, population excess risk. Relative risk (Risk ratio, rate ratio, odds ratio).

(06 hours)

References:

- 1. Altman DG, Practical statistics for medical research. CRC press; 1990
- 2. Bonita R, Beaglehole R, Kjellström T. Basic epidemiology. World Health Organization; 2006
- 3. Clayton and Hills, Statistical Models in Epidemiology. Oxford: Oxford University Press; 1993
- 4. Ethical Guidelines for Statistical Practice prepared by a committee on Professional Ethics of the American Statistical Association, Approved by the ASA Board in April; 2018
- 4. Gordis L, Epidemiology. Saunders-Elsevier Philadelphia; 2013
- 5. Fleiss JL, Levin B, Paik MC. Statistical methods for rates and proportions. John Wiley & Sons; 2013
- Kenneth J Rothman, Causal inference in Medicine. Epidemiology Resources. ISBN-13 978- 0917227035; 1988
- 7. Last JM, Abramson JH, Freidman GD. editors. A dictionary of epidemiology. New York: Oxford university press; 2001
- 8. Olinda Timms, Biomedical Ethics. 2nd Ed. New Delhi, Elsevier; 2019
- 9. Park K, Preventive and Social Medicine. Jabalpur: M/s Banarsidas Bhanot Publishers; 2011
- Rothman KJ, Greenland S, Lash TL. Modern epidemiology. Lippincott Williams & Wilkins 2008
- 11. Schlesselman JJ, Case-control studies: design, conduct, analysis (Monographs in Epidemiology and Biostatistics) Oxford University Press; 1982

https://www.amstat.org/ASA/Your-Career/Ethical-guidelines for Statistical Practice.aspx

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Demography

Course Objective:

- To familiarize students on the fundamentals of population studies and its links with health, family planning, population policies and programmes.
- To know the source and types of data.
- To define the population trend by geographically.
- To discuss the population policy.

Course:

- -Methods of demographic data collection
- Sources of data
- Population
- -Population composition -World population growth -Growth of Indian population -- -

Fertility

- -Mortality
- Migration/ urbanization -Population projections -Life tables -Population policy

Suggested texts:

- 1) Principles of population Studies: Asha Bhende and Tara Kanitkar, Himalaya Pub, Houses, Mumbai, 1996
- 2) Population: John Weeks, Wordsworth pub., California, USA,1994.
- 3) Population Transition In India: S.N.Singh, M.K.Premi, P.S.Bhatia, B.R.Publishing Corporation, Delhi, 1989.
- 4) Population in the context of India's development: P.B. Desai UGC UNFPA project, Ahmedabad, 1987.
- 5) Demography: Peter Cox, Cambridge University Press, U.K., 1989.
- 6) Techniques of Demographic Analysis: K.B. Pathak, F. Ram, Himalaya Publishing Houses, Mumbai, 1992.
- 7) Health Monitor: Foundation for Research in Health S, Mumbai, 1990.
- 8) National Family Health Survey 1, 2 and 3: International Institute for Population Sciences, Mumbai.

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9) Basic Demographic Techniques and Applications – K. Srinivasan, Sage Publications, 1998 10) World Population Prospects, United Nations Population division, Department of Economic and Social Affairs.

Basic Epidemiology

Course Objectives:

- To familiarize students on concepts and use of epidemiology, methods to measure and describe health of populations and risk measurement.
- Competent to apply concepts and principles associated with health and disease in the prevention & control of disease.
- Able to apply epidemiological principles.

Course:

- -Historical aspects, definition, aim and uses
- Descriptive epidemiology
- -Determinants of disease, Natural history of disease
- Epidemiological principles in prevention and control disease
- -Risk measurement, Measurement of morbidity and mortality: Incidence, Prevalence, Age-adjustment and survival analysis, use of morbidity and mortality
- Epidemiological study designs
- -Bias, confounding and interaction
- Causal association
- Nutritional surveillance

Suggested texts:

- 1. Gordis Leon Epidemiology (3rd edition), W B Saunders and Co.
- 2. Beaglehole. R. Bonita, et. al Basic Epidemiology:, WHO Publication, Geneva, 1993.
- 3. David E., et. al. Foundations of Epidemiology: Oxford University Press, New York, 1984.
- 4. Barkar, D.J.P., Practical Epidemiology: Churchill pub, Livingstone, 1982.
- 5. Epidemiology in health care planning: E.A. Knox (ed), Oxford University Press, New York, 1979.
- 6. Katz Mitchell: Study Design and Statistical Analysis: A Practical Guide for Clinicians
- 7. ast, J.M., Spasoff, R.A. Harris, S. S. and Thuriaux, M.C. (Eds): A Dictionary of Epidemiology, Oxford University Press, New York, 4th Ed., 2001.
- 8. Mayer Dan Essential Evidence-Based Medicine Series: Essential Medical Texts for Students and Trainees
- 9. Silman and McFarland: Epidemiological Studies A Practical Guide 2nd Edition
- 10. Aschengrau and Seage: Essentials of Epidemiology in Public Health
- 11. Friis Robert: Epidemiology for Public Health Practice, Third Edition
- 12. Timmreck Thomas C: An Introduction to Epidemiology, Third Edition

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FIRST YEAR- SECOND SEMESTER

PAPER 201-DEMOGRAPHY

> COURSEDESCRIPTION:

- The course enables the students to get acquainted with the population and basic issues in human culture and economic behaviour, which are essentially the grounds on which the health issues develop and sustain. The focus of the course is on population growth and dynamics of population growth.

> OBJECTIVES:

- At the conclusion of the course, the student will be able to:
 - Understand the basics of demography.
 - Use demographic tools in understanding public health issues Knowledge attitude and practices.
 - Discuss global demographic regimes and impact on public health.

> CONTENTS:

- 1. Introduction to Demography:
 - Definition,
 - nature,
 - Scope and importance of demography

2. Demography and population Studies

3. Source of Data-

- Indian Censuses: Historical view, salient features of Indian censuses
- Vital Statistics: Registration of births, deaths Marriages-Act1966
- National sample services organization (NSSO),
- Demographic sample surveys in India, National Family health Surveys (NFHS-I,II,III)
- U.N Demographic year book.(Annual)
- 4. Development of Demographic Research in India and its relevance for Public Health interventions, Demography & Social Science inter relations, Technical & substantive demography.
 - Rates & Ratios, Mid Year Population, measures of fertility and Mortality and

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morbidity- determinants and differentials across states and some selected countries, Life table concepts, migration and its relation to Public Health.

5. Population Theories-

- Malthusian Theory,
- Optimum population Theory,
- Demo_graphic Transition theory

6. Critical review:

- World Population Growth- Regional distribution & impact.
- Population Growth & distribution in India &states
- Population Structure & Characteristics:
- Age, Sex distribution- India & Selected countries
- Marital Status: age at marriage & Public Health Concerns
- Sex ratio in India Declining trends observed in states causes &consequences.
- Caste & Religious distribution of Population.
- Mortality- Expectation of life at birth Infant mortality determinants of trends, differentials- India, States & Selected Countries,
- Age & Sex differentials in mortality trends causes of death, Patterns- India, States, and selected countries.
- Causes of mortality decline- developed & developing countries focusing on Indian experience, AIDS- future prospects.
- Concepts of Fertility- Fecundity & fertility, Sterility- Primary, Secondary, abortion, natural fertility- biological limits and social determinants, Physiological factors, role of Social and cultural factors of fertility, still births, levels trends and differentials infertility.

7. Family Planning Programme-

- Global View,
- Critical Review of Indian F.P.P Programme, achievements, management,
- Methods of Birth Control -male ,female methods, Mechanical, Chemical, Natural and other methods,

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- Medical Termination of Pregnancies Act,
- Post legalisation Scenario in India.

8. Population policy-

- India and China- One Child Policy, 2 child policy-consequences,
- Role of immigration in contemporary world.

> PRACTICUM:

 Practical exercise such as survey, Family planning, KAP studies based on primary and secondary data etc.

> REFERENCE:

- Bouge Donald: Principles of Demography, John wiley & Sons, NewYork.
- Srivastava S.C: Studies in Demography, Jai Prakashnath & Co, Subash Bazar, Meerut, India.
- Asha A Bhende & Thara Kanitkar: Principles of population studies, Himalaya Publishing Hse.
- Neelakantan N: A modern treatise in preventive medicine & Community health, Neela publishers, Venu Vilas, Poojapura, Thiruvanathapuram.
- Park K: Text book of preventive and social medicine, M/s Banarasidas,
 Jabalpur.
- Barclay G.W.: Techniques of population analysis, Wiley, NewYork
- Cox P.R: Demography, England.

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Crosscutting issues relevant to Professional Ethics in the Curriculum

M.Sc. Research Ethics	Link
Post graduate Diploma in Bioethics and Medical Ethics	Link
Post graduate Diploma in Clinical Ethics	Link

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(DEEMED TO BE UNIVERSITY)
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Centre for Ethics

Other courses/training programs offered

- Intensive Summer Workshop on Ethics and Research (I-SWEAR)
- Value Added Course in Bioethics and Environmental Ethics
- Value Added Course in Clinical Ethics and Medical Humanities
- Applied ethics for Bachelor in Physiotherapy (BPT) and Masters in Physiotherapy (MPT) students

https://www.yenepoya.edu.in/academics/centers/centre-ethics

http://www.ethics.edu.in/

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ATTESTED

PROFESSIONALISM AND VALUES

Course description- This course is intended to teach the concept of what it means to be a professional and how physiotherapy as a profession is different from other vocations. It will also explain how relevant Professionalism is in terms of the healthcare system and how it affects the overall patient and healthcare environment.

First Semester (0-6 months)				
Course code &Title	Hours			Weekly class hours
	Theory	Practical	Total	
Foundation course - Internal examination				
AP01PT 1S5- Professionalism and values	15	-	15	1

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- 1. Professional values- Integrity, Objectivity, Professional competence and due care, Confidentiality. Core values- Accountability, Altruism, Compassion/ caring, excellence, integrity, professional duties, social responsibility.
- 2. Personal values- ethical or moral values
- 3. Attitude and behavior- professional behavior, treating people equally
- 4. Code of conduct, professional accountability and responsibility, misconduct
- 5. Differences between professions and importance of team efforts
- 6. Cultural issues in the healthcare environment
- 7. Entry level health care practitioner, direct access, autonomy in profession, practitioner of practice and evidence-based practice.

The five roles of the Physiotherapist-

- 1. The Physiotherapist as Patient/Client manager
 - a Evaluation and diagnosis
 - b Diagnosis as clinical decision-making
 - c Prognosis
 - d Discharge planning and discontinuance of care
 - e Discontinuance of care
 - f Outcomes
 - g Clinical decision making
 - h Referral relationships
 - i Interpersonal relationships
 - j Ethical and legal issues
 - k Informed consent
 - Managed care and fidelity.
- 2. The Physiotherapist as Consultant
 - a Physiotherapy consultation
 - b Building a consulting business
 - c The consulting process
 - d The skills of a good consultant
 - e Trust in the consultant/client relationship
 - fi Ethical and legal issues in consultation
 - g Components of a consulting agreement.
 - 3. The Physiotherapist as Critical Inquirer
 - a. History of critical inquiry
 - b. Evidence-based practice
 - c. Outcomes research
 - d. Whose responsibility is research?
 - e. Roles of the staff physiotherapist in critical inquiry
 - f. Collaboration in clinical research



- g. Ethical and legal issues in critical inquiry.
- 4. The Physiotherapist as Administrator
 - a. History of physiotherapy administration
 - b. Contemporary physiotherapy administration
 - c. Patient/client management
 - d. First-line management
 - e. Midlevel managers and chief executive officers
 - f. Leadership
 - g. Ethical and legal issues.
 - 5. The Physiotherapist as Educator
 - a. History of physiotherapy education
 - b. Contemporary educational roles of the physiotherapist
 - c. Teaching opportunities in continuing education
 - d. Academic teaching opportunities
 - e. Theories of teaching and learning in professional education
 - f. Ethical and legal issues in physiotherapy education.

COMMUNITY ORIENTATION AND CLINICAL VISIT

The objective of this section of the foundation course is to sensitize potential learners with essential knowledge; this will lay a sound foundation for their learning across the under-graduate program and across their career. Innovative teaching methods should be used to ensure the attention of a student and make them more receptive such as group activities, interactive fora, role plays, and clinical bed-side demonstrations.

First Sen	uester (0-6 months)				
Sl. No. Co	Course Titles	Hours			Weekly
		Theory	Practical	Total	class hours
Foundati	on course - Internal examination				
1	Community orientation and clinical visit	-	-	45	3

- 1. The community orientation and clinical visit will include visit to the entire chain of healthcare delivery system -Sub Centre, PHC, CHC, SDH, DH and Medical College, private hospitals, dispensaries and clinics.
- 2. The student will also be briefed regarding governance at village level including interaction and group discussion with village panchayat and front-line health workers.
- 3. Clinical visit to their respective professional department within the hospital.

BSc (Forensic Science, Data Analytics, Cyber Security)

DC01FSC-6C5

Ethics in Information Technology and Computer Communication (Total Hours 30)

Goal: To develop ethics related to computer profession and development.

Objectives: Objective of this course is to expose the students

- To ensure the privacy and safety of the computer users.
- To helps people, use the computer in the right ways.
- To guarantee that the works that done by someone did not declare by other people.

Teaching Learning Methodology:

Lectures, Class discussions, Discussion groups, Student Presentation, case studies. Use of flip chart board by instructor as aid in teaching.

Unit 1 Risk and Responsibility

In this segment of the course we evaluate the risks of computer technology. Some of these risks are the results of imperfections in the technology itself, while others are the consequence of human misunderstandings and misinterpretations. We will ask questions such as: how to assess the gravity of risks against the clear benefits of computer technology? Who bears the risks and who should be making the decisions about whether they are acceptable? Is computer technologyin any way a unique technology in the nature and extent of the risks it poses?

Following the discussion of risk, we examine responsibility. Who is responsible for risks and harms caused by computing? What are the special responsibilities, if any, of computer professionals? Beyond the responsibility to produce systems that work, do computerprofessionals have a social responsibility to see that their technology is used only for thebetterment of society? We will apply legal and philosophical concepts to these discussions.

Unit 2 Ethical Theory

Ethical theories and concepts from the Western philosophical tradition offer ways to analyze and clarify practical questions about values and information technology. In this segment of the course we review two basic approaches to ethical theorizing: deontology and consequentialism. We also study the concept of rights and justice. These enhance our understanding of the many issues in information technology ethics that are framed in terms of "rights": the right to own software, the right to privacy, and the right to benefit from computing. We also examine the relationship between law and morality. The theoretical approaches and concepts will be applied and developed throughout the rest of the course.

Unit 3 Intellectual Property and Computer Software

Is it wrong to make unauthorized copies of software? Should software be free? Is the patenting of software good for society? These are some of the questions addressed in this section on the private ownership of computer software. Although much of the scholarly work in the area of software ownership is concerned with detailed legal questions, we will focus on its philosophical and ethical aspects.

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Unit 4 Privacy and Information Technology

Poll after poll show that Americans are concerned about the erosion of their privacy. They think the government knows too much about them and they are becoming increasingly aware of the many other institutions that have access to their records. Information technology is at the heart of many of these intrusions on privacy. This section of the course examines the use of computerized record-keeping and its effects on privacy. Drawing on moral and legal understandings of privacy, it evaluates the claims by individuals in technologically advanced societies to be free of surveillance.

Unit 5 Crime by Computer

Reports of computer crime elicit a mixture of reactions. On the one hand, people are worried about how vulnerable society's computerized infrastructure is to infiltration and destruction. Onethe other, they are impressed by the ingenuity of the so-called "hackers." How should we regard infiltration onto computer systems? What computer crimes are really bad? Are hackers mere villains of are they Robin Hoods?

Unit 6 The Networked World

More than any other application of computer technology, digital networks have captured the public's fascination and imagination. But is all of the attention warranted? Will computer networks transform society, revolutionize social institutions, remake communities and the political landscape, and change the world economy; or will they merely provide new outlets for consumerism and entertainment? How much should society invest in the new networks? Should the government ensure universal access to networks even to those who cannot afford to pay the cost?

The final segment of the course will discuss these questions and others. It will evaluate debates about civil liberties, like free speech, on the internet. What rules should govern behavior on the internet? We will also consider the effects that networks may have on fundamental values such as privacy and property.

Suggested Readings:

- Johnson, D. G. (1985). Computer ethics. Englewood Cliffs (NJ).
- Bynum, T. W. (2001). Computer ethics: Its birth and its future. Ethics and Information Technology, 3(2), 109-112.
- Bynum, T. W., & Simon, R. (2004). Computer ethics and professional responsibility.

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