DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY

(The First Pharmacy University in India)

School of Allied Health Sciences and Management



Syllabus Book

MBA in Healthcare & Hospital Management

MBA in Healthcare & Hospital Management (MBA-HHM)

MBA in Healthcare & Hospital Management (MBA-HHM) program emphasizes on developing knowledge component, skill and attitude pertaining to Hospital & Health Managers. The program will help the candidates in developing expertise in planning and managing different types of hospitals/healthcare institutions and equip them with problem solving strategies. The program prepares the students for leadership roles in the hospital and health sector, through training in operational and project management of hospitals, including orientation in the managerial aspects of clinical and support services.

Program Structure, Course Curriculum And Scheme of Examination

Program Overview

This program aims to develop professional hospital and healthcare administrators with requisite skills in planning, implementation, operational Management, problem solving, consultancy and entrepreneurship. Through this rigorous program, graduates are able to manage hospitals and healthcare organizations globally, both in the public and the private sectors, thus meeting the demand for quality healthcare management.

Program Outcomes: After completion of the program, the students would be able to:

PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions and would enhance their administrative competence and decision making, when facing the challenges of the hospital and healthcare industry.

PO2.Effective Communication: Speak, read, write and listen in person and through electronic media to promote knowledge through applied and conceptual research relevant to hospital and healthcare management and to disseminate this knowledge through publications for furtherance of healthcare development.

PO3.Social Interaction: Elicit views of others and mediate disagreements while applying skills in planning and managing hospitals and healthcare organizations to help reach conclusions in group settings.

PO4.Effective Citizenship: Demonstrate empathetic social concern towards national development, and the ability to act with an informed awareness of healthcare issues and hospital policies.

PO5. Ethics: Recognize ethical issues, ethical and social responsibility towards healthcare providers, patients and society, to justify the moral judgement concerning medical profession and inspire social values

PO6. Environment and Sustainability: Get Responsible towards the wellbeing of environment, the patients, healthcare professionals and the community by reducing toxicity of hospital waste, minimizing the use of hazardous chemicals, recycling and realizing the importance of sustainable designs and building techniques to create true healing environment.

PO7. Self-directed and Life-long Learning: Engage in independent and life-long personal and professional learning and developing skills to cope with and sociotechnological changes

Program Specific Outcomes: After completion of the program, graduates should be able to

- **PSO1**. Understand the latest concepts and techniques of management and their applications in making their administrative roles effective and efficient.
- **PSO2**. Have the skills to analyse and solve operational problems in the delivery of hospital and healthcare services.
- **PSO3**. Use appropriate strategies for effective planning, implementation and evaluation of hospital and community based programs.
- **PSO4.** Apply the qualitative and quantitative analytical tools as applicable to health and hospital management related problems.
- **PSO5.** Develop skills with the focus on strategic responsibility for training and development of human resource for health care delivery.
- **PSO6.** Explain the legal and regulatory environment and its implications for managing the hospital and healthcare settings.
- **PSO7.** Promote the efficient and equitable allocation of resources and development of strategies to promote cost-effective healthcare.
- **PSO8.** Apply scientific approach to reduce cost of care through better material and money management.
- **PSO9.** Use oral and written communication skills and integrate appropriate technology and software skills to develop informative, explanatory, and persuasive presentations.

Course Structure and Duration

It will be an intensive full time two years course, comprising of four semesters, which will include classroom lectures, tutorials, seminars, journal club and practical exposure in various departments of an approved hospital/s by the university. The first 2 semesters have a uniform, comprehensive curriculum for both the aspirants of Hospital and Healthcare. From 3rd semester onwards, specialized and focused subject specific learning for the aspirants.

This booklet contains the Programme Structure, detailed curriculum and the scheme of examination. The importance of each course is defined in terms of credits assigned to it. The credit units of each course have been further defined in terms of contact hours i.e. Lecture hours (L), Tutorial Hours (T), Practical Hours (P).

It is hoped that it will help the students tostudy in a planned and a structured manner and promote effective learning.

Wishing students an intellectually stimulating stay at Delhi Pharmaceutical Sciences and Research University.

MBA IN HEALTHCARE & HOSPITAL MANAGEMENT

(MBA-HHM) – Total Credits: 115

$\boldsymbol{SEMESTER-1}$

	Paper		Pe	erio	ds	Credit	Evalu	ation sch	eme
Semester	Code	Subject	L	T	P	Units	Internal	External	Total
	HHM 101	Principles of Management	3	1	-	4	20	80	100
	HHM 102	Healthcare Delivery System and Policies	3	1	-	4	20	80	100
I	HHM 103	Fundamentals of Health Economics and Financing	3	1	_	4	20	80	100
	HHM 104	Human Resource Management	3	1	_	4	20	80	100
	HHM 105	Research Methodology	3	1	-	4	20	80	100
	HHM 106	Demography	3	1	-	4	20	80	100
		Total	18	6	-	24	180	480	600

		Value	Ad	lded	Co	urses				
Semester	Paper	Subject	Periods			Credit Units	Evaluation scheme			
	Code		L	T	P		Internal	External	Total	
	HHM 107	Communication Skills-I	2	ı	-	2	50*	-	50	
I	HHM 108	Computer Applications Lab	-	-	4	2	50*	-	50	
	HHM 109	Foreign Language (French / German)	2	-	-	2	50*	-	50	
		Total	4	-	4	6	150	-	150	

^{*}Evaluation to be conducted by internal faculty / examiner

SEMESTER - 2

Compagian	Paper	Cubica4	P	eriod	ls	Credit	Evalua	ation sche	me
Semester	Code	Subject	L	T	P	Units	Internal	External	Total
	HHM 201	Biostatistics	3	1	-	4	20	80	100
	HHM 202	Epidemiology	3	1	-	4	20	80	100
	HHM 203	Organizational Behaviour	3	1	-	4	20	80	100
	HHM 204	Laws and Ethics in Healthcare	3	1	-	4	20	80	100
2	HHM 205	Quality Management & Patient Safety	3	1	-	4	20	80	100
	HHM 206	Material Management in Healthcare	3	1	-	4	20	80	100
	HHM 207	Financial Management and Accounting	3	1	-	4	20	80	100
		Total	21	7	-	28	140	560	850

	Value Added Courses											
Semester	Paper	Subject	Periods			Credit	Evaluation scheme					
	Code		L	T	P	Units	Internal	External	Total			
	HHM 208	Communication Skills – II	2	-	-	2	50*	-	50			
2	YGS 104	Yogic Sciences	2	-	-	2	10	40	50			
	YGS 104 (P)	Yogic Science Practical	-	-	2	1	10	40	50			
		Total	4	-	2	5	70	80	150			

^{*}Evaluation to be conducted by internal faculty/examiner. **At the end of 2^{nd} semester mandatory Summer Internship of 4-6 weeks. Internship report will be presented and evaluated during 3^{rd} semester.

SEMESTER - 3
Hospital Management Stream

Compaga	Paper	Paper Subject Periods		ls	Credit	Evaluation scheme			
Semester	Code	Subject	L	T	P	Units	Internal [#]	External	Total
	MHM 301	Hospital Planning	3	1	-	4	20	80	100
	MHM 302	Organization and Management of Clinical Services	3	1	-	4	20	80	100
	MHM 303	Organization and Management of Support & Utility Services	3	1	_	4	20	80	100
	MHM 304	Strategic Management	3	1	-	4	20	80	100
3	MHM 305	Operations Research	3	1	-	4	20	80	100
	MHM 306	Marketing Management in Hospitals	3	1	-	4	20	80	100
	MHM 307	Hospital Management Information System	3	1	_	4	20	80	100
	MHM 308	Summer Project Report on Hospital Practices *	-	-	_	4	100*	-	100
		Total	21	7	-	32	240	560	800

Health Management Stream

Compaton	Paper	Paper Subject		eriod	ls	Credit	Evaluation scheme			
Semester	Code	Subject	L	T	P	Units	Internal [#]	External	Total	
	MHC 301	Women, Child and Adolescent Health	3	1	_	4	20	80	100	
	MHC 302	National Health Programs	3	1	-	4	20	80	100	
	MHC303	Public Health Planning and Management	3	1	-	4	20	80	100	
3	MHC 304	Health Promotion Approaches and Management	3	1	-	4	20	80	100	
3	MHC 305	Operations Research	3	1	-	4	20	80	100	
	MHC 306	Environmental and Occupational Health	3	1	-	4	20	80	100	
	MHC 307	Health Information System	3	1	-	4	20	80	100	
	MHC 308	Summer Project Report on Health Practices*	-	-	-	4	100*	-	100	
		Total	21	7	-	32	240	560	800	

^{*}Evaluation for Summer Internship Report will be done by internal faculty/examiner (done after second semester)

SEMESTER-4

	Danan		P	erio	ods	Credit	Evalu	ation sch	eme
Semester	Paper Code	Subject	L	Т	P/S	Units	Internal #	External	Total
		Open E	lect	ive	Subj	ects			
	HHM 401	KPO Management	2			2	50	-	50
	HHM 402	Hospital Accreditation	2			2	50	-	50
	HHM 403	Entrepreneurship Management	2			2	50	-	50
	HHM 404	NGO Management	2			2	50	-	50
	HHM 405	Public Health Nutrition	2			2	50	-	50
4	HHM 406	International Health	2			2	50	-	50
7	(A)	Total			'	4		-	100*
		Project V	Wor	k E	valu	ation			
	HHM 407	Dissertation Report Evaluation (External)			-	6		150	150
		*Internal Assessment				6	150		150
		Viva-Voce				4		100	100
	(B)	Total				16			400
	(A+B)	Overall Total				20			500

^{*}Students can choose 2 elective subjects out of the given 6 subjects. Evaluation is done for 50 marks for each elective subject. #Evaluation Scheme for Internal Assessment is tabulated below.

*Internal Assessment

Semester	Details	Credits	Total Marks
	Journal Club Presentation	1	25
	Synopsis Presentation	1	25
	Conference/Seminars Attended	1	25
	Publications:	1	25
4	• Submitted: 15/25		
4	 Accepted:20/25 		
	• Published: 25/25		
	Report Evaluation (Supervisor)	2	50
	Total	6	150

Principles of Management Paper Code - HHM 101

Contacts: 3L + 1T Credits: 4

Course Overview:

The course defines management principles and discusses major functions of healthcare manager towards the patient, the health organization and the community. Knowledge is imparted about the roles and responsibilities in order to accomplish stated objectives with efficiency.

Course Objectives: The objectives of this course are to:

- Provide knowledge and ability to apply managerial principles to the healthcare environment.
- Discuss organizational behaviour as well as the roles and responsibilities of management and leadership within healthcare organizations through the macro (organization-wide) and micro (individual and team performance) perspectives.
- Inculcate the practice of managing individuals and groups through motivation, communication, teamwork, leadership, organizational change, coalition building, negotiation, and conflict management and resolution.

Course Outcomes: After Completion of this course, students would be able to:

CO1 Describe key concepts, theories and techniques for analyzing different organizational situations.

CO2 Identify and demonstrate the dynamic nature of the environment in which planning, organizing, controlling, staffing, decisions making skills are demonstrated and help the organization in implementation of its vision and mission.

CO3 Apply the introduced conceptual frameworks, theory and techniques to lead the organization in achieving its goals

Course Content:

Unit 1: Introduction to Management

Management- definition, scope, function and significance; approaches to management: system and contingency; Levels of management-concepts of PODSCORB, managerial grid; Evolution of management thoughts-contribution of F.W. Taylor, Henri Fayol and contingency approach, functions of managers.

Unit 2: Planning and Decision making

Planning- definition, characteristics, objectives, nature, importance, steps, planning process, advantages and disadvantages; Forecasting: definition, techniques, advantages and disadvantages; Objectives and MBO-meaning of objective, MBO, process of MBO, benefits of MBO; strategies, policies and planning premises- nature & purpose, the

strategic planning process, TOWS matrix, Portfolio matrix, porter's competitive strategies, implementation. Decision making- meaning, characteristics, process, the systems approach

Unit 3: Organizing

Organizing- concepts, structure (formal & informal, line & staff and matrix), meaning, advantages and limitations; Departmentation - formal and informal organization, Organizational division-the department, the structure and process of organizing, the span of management; departmentation by time, enterprise function, geography, product, customer, matrix organization; Strategic Business Units, line and staff concepts, Delegation- authority & responsibility relationship. Staffing- overview of the staffing function, situational factors affecting staffing

Unit 4: Motivation and Leadership

Directing- Meaning and Process; Motivation- Theories, Systems and Contingency Approach to Motivation. Leadership- Defining Leadership, Ingredients of Leadership, Styles and Functions of Leadership, Trait Approach to Leadership, Situational or Contingency Approaches to Leadership, Communication.

Unit 5: Coordination and controlling

Co-Ordination- Feature, Types, Problems, Steps, Co-Ordination and Co-Operation; Controlling- The Basic Control Process, Initial Control Points and Standards, Control as A Feedback System, Requirement for Effective Control; Control Techniques - The Budget, Traditional Non-Budgetary Control Devices

Text and references:

- 1. Essentials of Management. Author Harold Koontz, McGraw-Hill series in management
- 2. Management. Stephen P. Robbins, Mary Coulter. 11th ed
- 3. Tripathy PC And Reddy PN, "Principles of Management", Tata McGraw-Hill, 1999.
- 4. Decenzo David, Robbin Stephen A, "Personnel and Human Reasons Management", Prentice Hall of India, 1996
- 5. Goel, R. K. S. (2007). Hospital administration and management: Theory and practice. Deep and Deep Publications.

Healthcare Delivery System and Policies Paper Code- HHM 102

Contacts: 3L + 1T Credits: 4

Course Overview:

The course will provide the requisite knowledge and understanding of health systems and policies, disease burden, health inequalities and global health scenario.

Course Objective: The objective of this course is:

To provide 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.

Course Outcomes: After completing the course, students would be able to:

CO1 Analyze the impact of health care policies on services delivery provided by the industry.

CO2 Conceptualize the role of Indian health care delivery system and how it compares with the other systems of the world; and also the role of hospitals as a supportive & referral services to the national goal.

CO3 Identify major trends in the Indian healthcare system.

CO4 To emphasize the concept of health & factors responsible for disease causation, its prevention & estimation of disease load in the community.

CO5 Identify concerns of the Indian healthcare system like health disparities etc

CO6 Design alternative approaches to address significant health care issues.

Course Content:

Unit 1: Health and Development

Concept of Health and disease, health and its determinants, Public Health indicators - Mortality Rates (IMR, MMR, TFR etc) and Morbidity (Incidence and Prevalence), Disease burden in terms DALY, Disease dynamics, Holistic approach to Health.

Unit 2: Social Determinants of Health

Female feticide, Child Labour, Substance Abuse, Civil Unrest, Domestic Violence, Corruption and Health, Gender and Health, Effect of Urbanization on Health, Ageing population

Unit 3: Indian Healthcare System and Delivery

Evolution of Health Planning in India, Concept and Components of Primary Health Care, Rural Healthcare Structure of India, Rural Health Statistics, Indian Public Health Standards, Overview of National Health Policy 2017 and National Health Mission.

Different National Health Surveys.

Unit 4: Global Trends

Sustainable Development Goals, and Role of International Agencies viz. WHO, UNFPA, UNICEF in health sector.

Text & References:

- 1. K Park, Preventive and Social Medicine, Bansaridas Bhanot Publishing House.
- **2.** Brijesh C Purohit. Health Care System in India: Towards Measuring Efficiency in Delivery of Services.
- 3. Maxcy-Rosenau-Last, Public Health & Preventive Medicine, 14th Edition Ed Robert Wallace.

Fundamentals of Health Economics and Financing Paper Code- HHM 103

Contacts: 3L + 1T Credits: 4

Course Overview: The course equips students with basic economic concepts and principles for better resource management in the hospitals. The rationale behind economics is to demonstrate the application of the application of the economic principles and methodologies to key management decisions within organization.

Course Objectives: The objectives of this course are:

- To describe basic concepts of health economics
- To develop an understanding of healthcare market and the relationship between economics health development;
- To analyse the cost and cost behaviour in hospital environment;

Course Outcomes: After completing the course students would be able to:

CO1 Asses how uncertainty and asymmetric information affect demand for healthcare.

CO2 Assess the value of health and its implications for decisions allocating scarce resources.

CO3 Describe basic economic concepts, such as supply, demand, free & chained markets and price elasticity.

CO4 Demonstrate management of organizational costs within the economic environment of various health care industries.

CO5 Apply economic tools to improve decision making in healthcare.

CO6 Acquaintance to the concepts of Health insurance.

CO7 Demonstrate knowledge of various types private, public and community based insurance.

CO8 Demonstrate knowledge of the operation and management of insurance entities, and the economic implications of organizational design and structure.

Course Content:

Unit 1: Key concepts of Economics

Definitions and basics of Health Economics, Scarcity and Growth; Scope of Economics - Theoretical, Applied and Descriptive; Micro and Macroeconomics; Economic Agents, Free market mechanism and chained market Mechanism; Economies and Diseconomies of scale

Unit 2: Basic concepts of Supply and Demand

Law of Demand and Supply, Demand Curve, Supply Curve, Shifts in demand and supply curve; Price Elasticity of demand; Factors determining Demand for healthcare – Price factors, Patient factors and Physician factors (Supplier Induced Demand)

Unit 3: Healthcare Market:

Market Failure: Imperfect Competition, Risk and Uncertainties, Unequal Information, concern of equity, Externalities; Grover C. Wirick factors of demand for Healthcare.

Unit 4: Concepts of Costs and Healthcare Expenditure

Classification of Costs on the basis of Traceability, cost behaviour, controllability and selection among alternatives; Calculations and curves of Total Costs, Fixed costs, Variable costs, Average Costs and Marginal cost; Public Health Expenditure on Health and National Health Accounts

Unit 5: Health Insurance

Insurance and demand for healthcare, Adverse Selection, Moral Hazard; Private Health Insurance – Mediclaim, Third Party Administration (TPA) Management; Social Health Insurance – ESI, CGHS, RSBY, Ayushman Bharat; Microfinance.

Text & References:

- 1. Dutta Shuvendu Bikash, Health Economics for Hospital Management, Jaypee publications.
- 2. Brijesh C Purohit, Economics of Public health and Private Healthcare and Health Insurance in India, Sage publications.
- 3. Ceri J Phillips. Health Economics- An introduction for health professionals, Blackwell publishing.
- 4. Clewer Ann and D Perkins. Economics for healthcare management, Prentice Hall.
- 5. Folland S, A.C. Goodman, and M. Stano, The economics of health & Healthcare, Prentice Hall
- 6. Usha Mehta, A.D. Narde. Health Insurance in India and Abroad, Allied Publishers.
- 7. Thomas K. T., Sakthivel R.Health Insurance In India: Overcoming Challenges and Looking Ahead, Lambert Academic Publishing, 2012

Human Resource Management Paper Code- HHM 104

Contacts: 3L + 1T Credits: 4

Course Overview:

The course aims at developing the skills of managing people in the health organizations and systems. It also Introduces concepts of human resource management in the context of organization, organizational characteristics, learning organization, human resource planning, recruitment and selection, job analysis and evaluation, performance appraisal, career planning, motivation, leadership, team work, and managing employees relations.

Course Objectives: The objectives of this course are to:

- Provide an understanding of the dimensions of the management of human resources, with particular reference to HRM policies and practices in India.
- Explain the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.

Course Outcomes: After completing the course, students would be able to:

CO1 To describe the organizational context in which human resource management activities take place.

CO2 Describe human resource planning as a systematic approach to the acquisition, use and deployment of people in the organization

CO3 Conduct job analysis and job responsibilities; outline the nature of the contract between the employer and an employee

CO4 Identify key issues in performance appraisal, training and development of the employees

CO5 Describe the main features of the collective relationships between employers and employees and describe organizational characteristics and learning organization

Course Content:

Unit 1: Overview of HRM

Introduction of HRM, Overview of HRM, Scope of HR, Nature of HR, Need for HR Planning, Organization culture- Induction and Socialisation, Roles and Responsibilities of HR Manager, Challenges Issues in HRM, HR Information Systems- EHRM, International trends in HR Management

Unit 2: Human Resource Planning, Training and Development

Recruitment and Selection, placement and planning staffing. Job Analysis & Design-job description-job specification-job enlargement-jobenrichment.

Appraising & Managing Performance-different methods- Traditional and modern- and other methods-potential appraisal -succession planning, Promotion procedure and policies, Employee Training & Development, Career Planning & Development.

Unit 3: Wages and Compensation and Employee Grievances

Wages and compensation -Employee Remuneration, Administrative job evaluation, Designing and administering the wage and salary structure- Non financial rewards, Employee grievance Handling-Counselling and mentoring, Downsizing separation processes, Turnover retirement, Layoff discharge, VRS, Evaluation of HR effectiveness-HR audit

Unit 4: Industrial Relations

History- purpose-scope-objectives, Relationship of Industrial Relations with Employee Relations, Theories of Industrial Relations, Industrial Relations in Globalised Economy. The role of Government in Industrial Relations. National Commission on Industrial Relations Recommendations. HRM & IR

Unit 5: Trade Unions

History of Trade Unions -Structure-Organizations -Problems, Trade Unions -Theories, functions, methods. Trade Unions ACT 1926, Management of Trade Unions in India, Trade Unions in a liberalized era, Collective bargaining, workers' participation movement, managing employee Safety and Health, ILO and India

Text and References:

- 1. Human Resource Management, Ashwatthapa. 8th edition.
- 2. Human Resource Management Gary Dessler
- 3. Fundamentals of Human Resource Management, 9th Edition
- 4. David A. DeCenzo (Coastal Carolina University), Stephen P. Robbins
- 5. Human Resource Management Text and Cases (Paperback)- VSP RAO
- 6. Hospital Administration And Human Resource Management R.C. Goyal
- 7. Designing and Managing Human Resource Systems- UdaiPareek& T. V. Rao (Oxford& IBH Pub. Co. Ltd., New Delhi)

Research Methodology Paper Code - HHM 105

Contacts: 3L + 1T Credits: 4

Course overview:

The course introduces the concepts of research, ethical principles and challenges and the elements of the research process within quantitative, qualitative, and mixed methods approaches. The rigorous curriculum prepares students to become leading public health professionals capable of addressing current global health problems with multidisciplinary, evidence-based approaches. Students will use these theoretical learnings to review literature relevant to their field or interests.

Course Objectives: The objectives of this course are to:

- Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.
- Impart knowledge for enabling students to develop data analytics skills and meaningful interpretation to the data sets so as to solve the organizational problems.
- Describe the participants in conducting research work and formulating research synopsis and report.

Course Outcomes: After completing this course, students would be able to:

CO1 Critically analyze research and evaluation studies from the literature in terms of the appropriateness of their research questions, designs, methodologies, results and conclusions

CO2 Develop a comprehensive evaluation plan for an intervention or program.

CO3Conceptualize a research problem or an evaluation issue and design and carry out a study to address that problem/issue using appropriate research and analytic methods.

CO4Gain a better understanding of data analysis and statistical issues in design of experiments, as well as the techniques and terminology commonly used to elicit and communicate evidence concerning scientific hypotheses.

CO5Learn to properly interpret the strength of statistical arguments made by researchers, and how to weigh statistical and clinical evidence in assessing a scientific hypothesis.

Course Content:

Unit 1: Basics of Research

Definitions & uses of research in healthcare, Steps Involved in Research Process, Variables in research, Formulation of research problems, writing research questions, Development of conceptual framework.

Unit 2: Sampling & Research Designs

Sampling, Sampling Procedure, types of Sampling Techniques, reliability & validity in

research, Research Designs- Non-experimental & experimental research designs.

Unit 3: Review of Literature & Hypothesis

Sources of literature review, Writing literature review, Hypothesis- Meaning and types of hypothesis, Type I & Type II errors in hypothesis testing.

Unit 4: Data Collection

Different methods of data collection- Observation method, interview method, Questionnaire and schedule, Data Management: editing, entry and preparing data sets for analysis; Design and development of questionnaire.

Unit 5: Research Report

Structure and Components of Research Report, Types of Reports, Layout of Research Report, Method of writing a research report.

Unit 6: Research Ethics & Reference Writing

Ethics in health research, confidentiality and privacy, informed consent, vulnerable subjects and special treatments; Reference writing using endnote

Text and References:

- 1. Uma Sekaran & Roger Bougie, Research Methods for Business: A skill building Approach 7th edition.
- 2. RC Goyal, Research Methodology for Health Professionals, Jaypee Brothers.
- 3. Ranjit Kumar, Research Methodology a step by step guide for beginners, Sage Publications.
- 4. Gummersson, E. Qualitative methods in Management Research, Sage publications
- 5. Designing and conducting Health surveys, Jossey Bass Publishers.
- 6. Varkevisser, C. M., Pathmanathan, I., & Brownlee, A. T. (2003). Designing and conducting health systems research projects (Vol. 1). IDRC.
- 7. John Creswell (2013). Research Design: Qualitative, Quantitative, and mixed methods approaches. Fourth edition, Sage Publications
- 8. Kothari, C.R., 1990. Research Methodology: Methods and Techniques. New Age International. 418p.
- 9. Ulin P, Robinson E, Tolley E. (2005), Qualitative Methods in Public Health: A field guide for Applied Research, Jossey Bass Pub.
- 10. Russell Bernard H., Gery W. Ryan (2010), Analyzing Qualitative Data: Systematic Approaches, SAGE Publications.

Demography Paper Code-HHM 106

Contacts: 3L + 1T Credits: 4

Course Overview:

This course intends to teach global population trends and patterns, population and health, enhance the technical skill and knowledge regarding use of demographic data for policy analysis, program strategies and priorities. It would cover measures and indicators of nuptiality, fertility, mortality and migration and migrant health issues and provide skills in making population estimation and projection.

Course Objectives: The objectives of this course are to:

- Discuss basic techniques and concepts in population sciences.
- Explain students the fundamentals of population studies and its links with health.
- Apply practical knowledge and skills of demographic and health data sources.

Course Outcomes: After completing this course, students would be able to:

CO1: Provide necessary skill to evaluate the impact and consequence of population growth on society.

CO2: To give the knowledge of population policy, population measures, population dynamics, discuss population composition and characteristics; and basic concepts in population dynamics,

CO3: To provide the knowledge of causes of population growth and government's efforts to check it.

CO4: To know the causes of urbanization and its related problems.

Course Content:

Unit 1: Population Fundamentals

Science of demography, Demographic cycle, Population trends and demographic indicators, Factors affecting population, Demography and Family Planning and its role in population policy of India.

Unit 2: Demographic Studies

Fundamentals of population studies and its links with health.

Methods of demographic data collection, sources of data, population census, population composition, world population growth, growth of Indian population, morbidity, mortality, ageing, migration/urbanization, population projections life tables.

Unit 3: Family Planning

Fertility and fertility factors, Family planning, Population policies &programmes and National Population Policy, Family planning 2020 India commitment

Text & References:

- 1. Asha Bhende and Tara Kanitkar. Principles of population Studies, Himalaya Pub Houses,
- 2. John Weeks, Population, Wordsworth pub, 1994.
- 3. S.N.Singh, M.K.Premi, P.S.Bhatia. Population Transition In India, B. R. Publishing Corporation.
- 4. P.B. Desai. Population in the context of India's development, UGC UNFPA project.
- 5. Peter Cox. Demography, Cambridge University Press
- 6. K.B. Pathak, F. Ram. Techniques of Demographic Analysis, Himalaya Publishing Houses.
- 7. Health Monitor, Foundation for Research in Health S.
- 8. International Institute for Population Sciences. National Family Health Survey -1, 2 and 3, Mumbai.
- 9. K. Srinivasan. Basic graphic Techniques and Applications, Sage Publications, 1998

Communication Skills – I Paper Code- HHM 107

Contacts: 2L Credits: 2

Course Overview:

This course is designed to facilitate the students to communicate effectively by emphasizing on practical communication through refurbishing their existing language skills and also to bring one and all to a common take-of level

Course Objective:

To enable students to be an integral part of corporate communication network

Course Outcomes: After completing this course students should be able to:

CO1 Understand the scope and importance of communication

CO2Enhance their oral and written communication skills and use different forms of written communication techniques to make effective internal and external business correspondence.

CO3 Understand the importance of listening and speaking.

CO4 Produce different types of reports with appropriate format, organization and language

CO5Use of technology for improving the communication process.

Course Content:

Unit 1

Communication Skills-Meaning and Introduction- Process of Communication-Types of Communication-Verbal- Non-verbal -Advantages ,Disadvantages Body Language-Channels of Communication- Formal and Informal -Directions of Communication within organisation —Barriers to communication-Listening Skills.

Unit 2

Presentation Skills and confidence building, Aids to Correct business Writing, Email writing, Resume writing, Telephone etiquettes, Group Discussion,, Mind mapping, Networking skills, Soft skills, Facing Interviews-Mock interviews-FAQ, Stress management

Text & References:

- 1. Sharan J.Gerson and Steven M.Gerson "Technical Writing Process and Product" Pearson Education 2000.
- 2. Raymond V.Lesikar, John D. Pettit and Mary E.Flatley Lesikass Basic Communication Tata McGraw Will 8th Edition 1999.
- 3. Stevel. E. Pauley, Daniel G.Riordan Technical Report Writing Today AITBS Publishing & Distributors, India 5th edition 2000.
- 4. Robert L.Shurter, Effective letters in business Third Ed. 1983.
- 5. Communication Skills by Vasantha Patri
- 6. McGraith-Basic Managerial Skills for all Prentice Hall of India-6th Edition 2002.
- 7. Halliday, M.A. K R .Hasan, Cohesion in English, Longman, London 1976.

Computer Application Lab Paper Code-HHM 108

Contacts: 4P Credits: 2

Course Overview:

The course will expose the students to the developments in computer technology and will help the students understand the application ofInformation technology in the healthcare industry.

Course Objectives: The objectives of this course are:

- Todevelop the end-user ITskills
- To learn various Computerapplications, databases and statistical tools applicable in hospitals

Course Outcomes: On completion of this course, the students will be able to:

CO1: Understand the concept of Computer's Input/output devices, the concept of databases, data types, MS Word, MS Excel, MS Power Point, array, pointers, string, structures and files.

CO2: Design program logic on real-world industry related problems.

CO3: Apply programming concepts to compile programs to find solutions.

CO4: Apply of IT tools in various functions of pharmaceutical organizations.

Course Content:

Unit 1

Introduction to Windows: Application in Windows – word processing (MS Word) – Spreadsheet (MS Excel) – Presentation (MS Power Point) – Relational databases (MS Access).

Unit 2

Introduction to Databases: Application of Databases – Parts of Databases – Types of Databases – Role of Social Media in todays' scenarios-presenting of data-Social Media and Data-Big Data Introduction.

Unit 3

Awareness on the application of IT in Various functions of Hospital; Working knowledge of commonly used hospital software, Application of statistical tools through SPSS in the areas of Health services.

Foreign Language Paper Code HHM 109

Contact Hours: 2T Credit Units: 02

Course Overview:

The course would enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

Course Objectives:

- To familiarize the students with the Foreign language
 - o with the phonetic system
 - o with the accents
 - o with the manners
 - o with the cultural aspects

Course Outcomes: On completion of this course, the students will be able to:

CO1: Establish first contacts

CO2: Identify things and talk about things

CO3: Talk about his time schedule

CO4: Talk about travel in the foreign language

Course Contents:

FRENCH

Contenu lexical:

Unité 1: Premiers contacts

- 1. Nommer des objets, s'adresser poliment à quelqu'un
- 2. se présenter, présenterquelqu'un
- 3. entrer en contact : dire tu ouvous, épeler
- 4. dire où on travaille, ce qu'on fait
- 5. communiquerses coordonnées

Unité 2: Objets

- 1. identifier des objets, expliquerleurusage
- 2. Dire ce qu'on possède, faire un achat, discuter le prix.
- 3. Monter et situer des objets
- 4. Décrire des objets
- 5. comparer des objets, expliquersespréférences

Contenugrammatical:

- 1. articlesindéfinis, masculin et féminin des noms, pluriel des noms
- 2. Je, il, elle sujets, verbesparler, habiter, s'appeler, être, avoir, masculin et féminin des adjectifs de nationalité

- 3. tu, voussujets, verbesparler, aller, être, c'estmoi/c'esttoi
- 4. verbes faire, connaître, vendre, c'est/ilest + profession, quiest-ce ? qu'est-ce que ... ?
- 5. articledéfini, complément du nomavec de, quelinterrogatif
- 6. adjectifs possessifs (1), pour + infinitif
- 7. verbeavoir, ne...pas/pas de, questionavecest-ce que ?, questionnégative, réponse Si
- 8. Prépositions de lieu, il y a/qu'est-ce qu'il y a
- 9. accord et place des adjectifs qualificatifs, il manque...
- 10. comparatifs et superlatifs, pronoms toniques, pronom on

Unité 3: Emploi du temps

- 1. demander et donner l'heure, des horaires
- 2. racontersajournée
- 3. parler de ses habitudes autravail, de sesloisirs
- 4. dire la date, parler du tempsqu'ilfait
- 5. fixer rendez-vous (au téléphone par e-mail), réserver une table au restaurant

Unité 4: Voyage

- 1. réserver une chambre d'hôtel, demander la note
- 2. expliquer un itinéraire
- 3. parler de sesdéplacements, situer sur une carte
- 4. exprimer un conseil, une interdiction, une obligation
- 5. acheter un billet de train, consulter un tableaud'horaires

Contenugrammatical:

- 1. questionavec à quelleheure ? adjectifsdémonstratifs
- 2. verbespronominauxauprésent, les prépositions à et de :aller à venir de
- 3. adverbes de fréquence, pourquoi...? Parce que ...?
- 4. expression indiquant la date, verbes impersonnels
- 5. verbe pouvoir + infinitif, le lundi, lundi prochain
- 6. adjectifs possessifs (2), adjectif tout
- 7. impératif présent (1), nombres ordinaux
- 8. questionsavecest-ce que ? à et en + moyen de transport, en/au+pays
- 9. verbesdevoir+infinitif, ilfaut+ infinitif, ilestinterdit de
- 10. verbes: aller, venir, partir, questionsavecd'où, où,paroù, à quel, de quel

Text & References:

• le livre à suivre : Français.Com (Débutant)

GERMAN

Unit I: Introduction

Self introduction: heissen, kommen, wohnwn, lernen, arbeiten, trinken, etc.

All personal pronouns in relation to the verbs taught so far.

Greetings: Guten Morgen!, Guten Tag!, Guten Abend!, Gute Nacht!, Danke sehr!, Danke!,

Vielen Dank!, (es tut mir Leid!),

Hallo, wie geht's?: Danke gut!, sehr gut!, prima!, ausgezeichnet!,

Es geht!, nicht so gut!, so la la!, miserabel!

Unit II: Interviewspiel

To assimilate the vocabulary learnt so far and to apply the words and phrases in short dialogues in an interview – game for self introduction.

Unit III: Phonetics and Pronouns

Sound system of the language with special stress on Dipthongs

Simple possessive pronouns, the use of my, your, etc.

The family members, family Tree with the help of the verb "to have"

Unit IV: Articles

The definite and indefinite articles in masculine, feminine and neuter gender. All Vegetables, Fruits, Animals, Furniture, Eatables, modes of Transport

Unit V: Professions, Time and Time periods

To acquaint the students with professions in both the genders with the help of the verb "sein". Time and times of the day. Weekdays, months, seasons. Adverbs of time and time related prepositions

Unit VI: Colours Numbers and calculations – verb "kosten"

All the color and color related vocabulary – colored, colorful, colorless, pale, light, dark, etc. The counting, plural structures and simple calculation like addition, subtraction, multiplication and division to test the knowledge of numbers.

"Wie viel kostet das?"

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant 1, 2 & 3
- Rosa-MariaDallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

Biostatistics Paper Code-HHM 201

1 aper Code-IIIIWI 201

Credits: 4

Course overview:

Contacts: 3L + 1T

This course intends to teach bio-statistical methods and concepts used in the health sciences, emphasizing interpretation and concepts. It also develops the ability to read the scientific literature to critically evaluate study designs and methods of data analysis. The course also introduces basic concepts of statistical inference, including hypothesis testing, p-values, and confidence intervals.

Course Objectives: The objectives of this course are to:

- Develop the understanding of various statistical tools used for decisions making and explain how each tool can be used in the healthcare environment.
- Explain the students different types of data arising in public health studies; interpret differences in data distributions via visual displays; calculate standard normal scores and resulting probabilities.
- Describe the use of statistical software package SPSS for different hypothesis testing procedures covered in the course.

Course Outcomes: After completing the course, the students would be able to:

CO1 Learn different statistical techniques used in healthcare sector.

CO2 Learn to make practical use of statistical computer packages.

CO3 Develop a comprehensive evaluation plan for healthcare services with the help of statistical tools & techniques.

CO4 Gain knowledge of basic statistical tools with emphasis on their application in hospital environment.

CO5 Learn to write research proposals/reports/projects.

CO6 Understand the concepts of statistical inference

Course Content:

Unit 1: Introduction to Biostatistics

Classification of data, Source of data, Variables, Scales of measurement- nominal, ordinal, ratio and interval scale, building composite scales, measuring reliability and validity of scales.

Unit 2: Measures of central tendency and dispersion

Measures of central tendency- Mean, Median, Mode

- Measures of dispersion - Range, Mean deviation & Standard deviation.

Unit 3: Sampling and Probability distributions

- Population, Sample, Sampling frame, Sampling process, Types of sampling, sample size calculation.
- Concepts of Probability distributions— Binomial, Poisson & Normal Probability Distribution.

Unit 4: Hypothesis testing

- Null hypothesis, alternative hypothesis, level of significance, how to choose the statistical test
- Non parametric tests: Chi square test, Mann-Whitney U test
- Parametric tests: Student's T-test (One sample t test, Independent sample t test, Paired t test), ANOVA

Unit 5: Correlation and regression analysis

- Definition, types and degrees of correlation, Karl Pearson's coefficient of correlation, Spearman Rank correlation
- Regression Analysis: Linear regression, multiple regression

Unit 6: Statistical methods and application

SPSS processing, Statistical procedures-descriptive, univariate, bivariate and multivariate statistics; parametric and non-parametric tests; correlation and regression.

Text and references:

- 1. B.K. Mahajan. Methods in Biostatistics, Jaypee Brothers
- 2. P.S.S. Sundar Rao. An Introduction to Biostatistics: A manual for students in Health Sciences, J.Richard Prentice Hall, 1996.
- 3. TR Jain, SC Aggarwal, Quantitative Methods for MBA, VK India Enterprises.
- 4. Daniel, Wayne.W. Bio-Statistics: A foundation for Analysis in the Health Sciences, John Wiley and Sons Pub, 1991.
- 5. K. Vishwas Rao. Bio-Statistics: A Manual of statistical methods for use in the Health, Nutrition and Anthropology, Jaypee Brothers Medical Pub, 1996.
- 6. Verma B.L., Shukla G.D. Bio-Statistics perspective in Health care research and practice, C.B.S. Pub, 1993.
- 7. Krishnaiah, P.K. Rao, C.R. (ed), Handbook of Statistics, Elsevier Science Pub, 1988.
- 8. Beri Business Statistics (Tata Mc Graw Hill 2nd Edition).
- 9. Chandan J S Statistics for Business and Economics (Vikas 1998.Ist Edition).

- 10. Render and Stair Jr Quantitative Analysis for Management (Prentice-Hall, 7th edition)
- 11. Sharma J K Business Statistics (Pearson Education 2nd Edition).
- 12. Gupta C B, Gupta V An Introduction to Statistical Methods (Vikas1995, 23rd Edition).
- 13. Levin Rubin Statistics for Management (Pearson 2000, New Delhi, 7th Edition).

Epidemiology Paper Code-HHM 202

Contacts: 3L + 1T Credits: 4

Course Overview:

The course introduces risk measurement, age adjustment and survival analysis and use of morbidity and mortality indicators. It helps students understand the epidemiological study designs, bias, confounding and disease surveillance. The course also equips the students with knowledge and skills regarding general principles of public health research.

Course Objectives: The objectives of this course are to:

- Discuss models and inference underlying observational studies.
- Determine the applications of epidemiology in public health decision making.
- Evaluate the scientific merit and feasibility of epidemiological study designs.
- Describe and recognize potential causes of confounding in epidemiologic studies.

Course Outcomes: After completing the course, the students would be able to:

CO1 To study basic epidemiology principles, concepts and procedures useful in the surveillance and investigation of health-related states or events.

CO2 Describe key features and applications of descriptive and analytic epidemiology.

CO3 Calculate and interpret ratios, proportions, incidence rates, mortality rates, prevalence, and years of potential life lost.

CO4 Describe the processes, uses, and evaluation of public health surveillance.

CO5 Describe the steps of an outbreak investigation.

Course Content:

Unit 1: Basic concepts of epidemiology

Epidemiology: Basic concepts, methods, principles and use of epidemiology. Epidemiological tools for assessment of risks. Investigation of an epidemic and role of hospital in its control.

Unit 2: Descriptive epidemiology

Natural History: History of a disease and its application in planning intervention. Modes of transmission and measures for prevention and control of communicable and non-communicable disease. Diseases: Definition, calculation and interpretation of the measures of frequency of diseases and mortality.

Unit 3: Epidemiological measurement methods

Principal sources of epidemiological data, epidemiological research, summary measures (ratios, proportion and rates), incidence and prevalence, sociometric choice patterns in hospital ward groups. Uses and abuse of Screening Tests: Accuracy and clinical value of diagnostic and screening tests (sensitivity, specificity & predictive values).

Unit- 4: Epidemiological study designs and analysis

Various types of epidemiological study designs. Review of literature for a certain public health problem along with critical comments and formulation of solutions, Epi-info software for epidemiological analysis.

Text and References:

- 1. Beaglehole. R. Bonita, et. al Basic Epidemiology: WHO Publication, Geneva, 1993.
- 2. David E., et. al. Foundations of Epidemiology: Oxford University Press, New York, 1984.
- 3. Epidemiology in health care planning: E.A. Knox (ed), Oxford University Press, New York, 1979.
- 4. Silman and McFarland: Epidemiological Studies, Practical Guide 2nd Edition
- 5. Aschengrau and Seage: Essentials of Epidemiology in Public Health
- 6. Friis Robert: Epidemiology for Public Health Practice, Third Edition
- 7. Timmreck Thomas C: An Introduction to Epidemiology, Third Edition 2002
- 8. Text Book of Preventive and Social Medicines K. Park, M/s BanarasidasBhanot.
- 9. Preventive and Social Medicine Prabhakar Rao.
- 10. Text book of Social & Preventive Medicine Mahajan.

Organizational Behaviour Paper Code -HHM 203

Contacts: 3L + 1T Credits: 4

Course Overview:

Students study the behaviour of individuals and groups as part of the social and technical system in the Hospital ecosystem. They examine individual and group behaviour, communication, conflict and various management styles, motivational techniques and coordination in the work environment and apply these concepts to the development of an organization's human resources.

Course Objectives: The objectives of this course are to:

- Discuss organizational behaviour as well as the roles and responsibilities of management within healthcare organizations through the macro (organization-wide) and micro (individual and team performance) perspectives.
- Analyze and compare different models used to explain individual behaviour related to motivation and rewards, conflict and stress management.
- Understand the concepts like group dynamics, team building, negotiation, leadership styles and the role of leaders in a decision making process.
- Understand organizational strategy and culture, its dimensions, various organizational designs and concept of organizational change.

Course Outcomes: After completing the course, students should be able to

CO1 Identify the impact of individual behaviour on groups and on the organization as whole.

CO2Analyze and compare various theories of personality and learning theories

CO3Identify the role and importance of communication and resolving conflicts

CO4Explain group dynamics and demonstrate skills required for working in groups (team building)

CO5Identify the various leadership styles and the role of leaders in a decision making process.

CO6Analyze and compare different models used to explain individual behaviour related to motivation and rewards

Course Content:

Unit 1: Introduction to OrganizationalBehaviour

Nature Scope and Purpose – Definition of Organizational Behavior, Need, Importance and Emergence of Organizational Behavior — Frame Work – Organizational Behavior Models

The Individual - Foundations of Behaviour, Ability, Personality, Learning. Group and Interpersonal Behaviour, Decision Making, Values, Attitudes, Perception, Applications of Attributes. Individual Values and Ethics-Self-Concept, Self-Esteem and Self-Efficacy-Locus of Control-Abilities and Performance

The Group – Foundations of Group Behaviour, Defining and Classification of Groups, Group Decision Making, Understanding Teams – Types of Teams, Teams and Groups Concepts, Group Dynamics, Emergence of Informal Leaders and Working Norms – Interpersonal Relations – Communication – Control, Team Building

Unit 2: Leadership and Motivation

Meaning – importance – leadership approaches – theories – trait theories, Behavior theories, leaders Vs managers, contemporary issues in leadership., Power and politics – power centers –Organizational politics-tactics. Motivation – concepts, significance, theories: natural, incentive, behaviourist, socio cultural theory, content and cognitive (process) theories, thematic apperception test, attribution theory, approach avoidance, employee motivation- job characteristics model

Unit 3:Organisation Dynamics: Culture and Design

Definition of Organisational Culture, Characteristics of Culture, Strong and Weak types of Culture, Changing Organisational Culture, Differences in Culture and Climate, Assessing Organizational Citizenship Behaviour. Organisational Design - Definition of Organisation, Importance of Organising Process, Organisation Design Process, Internal Contingency Factors: Technology, External Contingency Factor: Environment and Information processing.

Unit 4:Organisational Strategy and Technology

Introduction, Definition of Strategy, Components of Organisational Strategy, Vision and Mission, Strategy Management Process, Organisational Strategy Implementation, Organisational Issues, Innovation Process, Project Groups, Technology Opportunity, Technological Concepts, Introduction of New Technologies in Organisations.

Unit 5: Conflicts, Negotiations & Stress Management

Definition, Transitions in conflict thought, functional Vs dysfunctional conflict, the conflict process. Consequence of Conflict-Stress, Emergence of Stress, Causes-Copying mechanisms, psychosomatic disorders, consequences, managing stress. Negotiating and Resolution- Conflict Management, managing interpersonal and Inter-group conflict-negotiation tactics, change.

Text and References:

- 1. Organizational Behaviour Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, $16^{\rm th}$ edition
- 2. Organizational Behaviour by Stephen P. Robbins
- 3. Organizational Behaviour by Fred Luthans
- 4. Hersey, P and Blanchard, K: Management of Organizational Behaviour
- 5. Behavioural Processes in Organization by D. M. Pesonjee, T. V. Rao and UdaiPareek

Laws and Ethics in Healthcare Paper Code -HHM 204

Contacts: 3L + 1T Credits: 4

Course Overview:

The course provides a forum for discussion and deliberation about ethical issues in the hospitals, equips students to identify and analyze critical ethical issues and to consider systematically the ethical responsibilities of all parties involved.

Course Objectives: The objectives of this course are:

- To acquaint the students with various legal aspects concerning type and character of the health care organizations and its duties towards patients and its employees.
- To familiarize the students in matters of liability of hospital medical negligence and medical malpractice in diagnosis, administration of drugs, surgery etc.

Course Outcomes: After completing the course, students would be able to:

CO1 Interpret statutes and court decisions affecting healthcare.

CO2 Explain how laws and regulations affect the structure and operation of healthcare organizations, including corporate law, tort law, fraud and abuse laws, etc

CO3 Assess how law protects patient rights and regulates patient-provider relationships, including informed consent, medical malpractice, confidentiality, treatment termination, advance directives, human reproduction, and obligations to provide care.

CO4 Analyze the impact of changing health care regulations on processes and services;

CO5 Advocate for laws that promote health policy values and goals.

CO6 Comprehend the consequences of not adhering to the laws.

Course Contents:

Unit 1: Laws pertaining to hospitals and medical profession

Laws pertaining to establishment of hospitals, legal requirements under MCI, Organ transplantation Act, Central births and death registration act and, Issuance of birth and death certificates, PCPNDT Act, MTP Act, Drugs and Cosmetics Act, Euthanasia, Indian medical degree Act 1916, IMC act & State medical act, Declaration of Geneva, Bio-Medical Waste Management Handling Rules.

Unit 2: Hospital's duties towards patients

Compulsory & voluntary duties of a medical practitioner towards the patient, Doctor patient relationship, Right of patient to modify the medical course of treatment, Parental rights and the rights of mentally unsound patients

Unit 3: Legal liabilities of Hospitals

Criminal, Civil and Tortuous, Absolute liability and vicarious liability, Medical Negligence, Legal remedies available to patients, Informed consent, Confidentiality and Professional Misconduct. Medical Jurisprudence

Unit 4:Medical Ethics

Code of Ethics, Ethical Committee, Ethics and Law, Basic issues, process of developing and implementing ethics and values in an institution, Code of conduct, Hippocrates Oath, Ethics of research, Ethical approval for Clinical trials, Case studies on Medical Ethics

Unit 5: Hospital as an Industry:

Consumer Protection Act and its application in Hospitals, W.B Clinical Establishment Act 2000; Workman Compensation Act.

Text and References:

- 1. Health Care Ethics by Benedict Ashley, 2006, Georgetown University Press.
- 2. Ethical Foundations of Health Care: by Jane Singleton and Susan Goodinson-McLaren, 1995, Mosby Medical
- 3. Medico-legal Aspects of Patient Care, 3rd Edition, R. C. Sharma, Peepee Publishers & Distributers- 2008
- 4. Cross-Cultural Perspectives in Medical Ethics by Robert Veatch, 1997, Harvard University Press
- 5. An Ethics Casebook for Hospitals by Mark Kuczewski and Rosa Lynn B. Pinkus, 1999 Georgetown University Press
- 6. An Introduction to Medical Ethics: Patient's Interest First by Arthur Siew Ming Lim, 2008, World Scientific
- 7. Ethics Under the Knife: Patient Care and Disservice in the Medical Industry by by Matt Koepke
- 8. Principles of biomedical ethics by Tom Beauchamp, 1979
- 9. The Immortal Life of Henrietta Lacks by Rebecca Skloot, 2010
- 10. Medical Ethics: Accounts of Ground-Breaking Cases by Gregory Pence, 19
- 11. Bioethics: Principles, Issues, and Cases by Lewis Vaughn, 2009
- 12. Medical Law and Ethics by Bonnie Fremgen, 2002
- 13. Medical Law and Ethics by Jonathan Herring, 2006
- 14. Medical ethics in the ancient world by Paul Carrick, 2001

- 15. Resolving Ethical Dilemmas: A Guide for Clinicians by MieczysławKlimaszewski, 1995
- 16. Textbook of Healthcare Ethics by Erich Loewy, 1989
- 17. Encyclopedia of Bioethics by Warren Reich
- 18. Doing Right: A Practical Guide to Ethics for Medical Trainees and Physicians by Philip C. Hébert, 2009
- 19. Kuchhel, M.c, 2003, Marcentile Law; Vikas Publishing Private Ltd. New Delhi (chapter 1-5)
- 20. P.L Mallick Industrial Law Eastern Book Company Lucknow.
- 21. Bio-Medical Waste Management Handling Rule 1998.
- 22. Law & Ethics in Nursing & Health Care, Nelson Thrones

Quality Management and Patient Safety Paper Code-HHM 205

Contacts: 3L + 1T Credits: 4

Course Overview:

The course provides basic concepts of quality in health care and approaches and skills to implement sustainable quality assurance program in the hospitals. Various quality improvement approaches, role of standards, use of quality improve tools, methods of quality assessment are discussed in the course.

Course Objective: The objectives of this course are:

- To understand the concept of quality management tools &techniques and to be able to implement those in the hospitals.
- To utilize data to support quality and performance measurement decision-making processes for health care entities.
- To incorporate the principles of quality management for improving outcomes in hospitals.
- To integrate quality improvement and evaluation strategies with systems such as Six Sigma, Lean Management etc.

Course Outcomes: After completing the course, students would be able to:

CO1 Analyze the concepts and measures of health care quality and patient safety.

CO2 Describe factors leading to a greater emphasis on quality measurement and improvement of care.

CO3 Demonstrate an understanding of tools used in quality measurement and improvement.

CO4 Assess how healthcare delivery models can be evaluated.

CO5 Analyze changes to implement in healthcare delivery to make it safe, timely, effective, equitable, efficient, and patient-centered.

CO6 Well versed with the management of Nosocomial infections.

Course Content:

Unit1: Basics of Quality Management

Definition of quality, Principles of quality, Need for focus on quality in healthcare;

Dimensions of quality in primary healthcare;

Different Quality Frameworks, Quality Control Circles;

Cost and Quality: Prevention Costs, Appraisal costs, Internal & External failure costs

Unit 2: Quality Approaches

Quality Control, Quality Assurance, QA cycle.

Total Quality Management: Principles of Edward Deming, Joseph Juran & Philip Crosby

Types and process of Benchmarking

Medical Audit and Prescription Audit.

Unit 3: Quality Management Tools and Techniques

Cause Effect Analysis and Pareto Analysis

Lean management: Lean Principles and its tools (5 S Techniques, 3 M technique);

Six Sigma Methodology: DMAIC methodology, Training and its application in hospitals.

Unit 4: Accreditation

Benefits of Hospital Accreditation, Quality Council of India (QCI), National Accreditation Board for Hospitals & Healthcare Providers (NABH) – its Accreditation procedure and Assessment criteria; Joint Commission International (JCI).

Unit 5: Patient Safety

Principles and Types of Patient Safety; International Patient Safety Goals, Hospital Acquired Infections, Control and prevention of Nosocomial Infections; Medical Errors and their prevention.

- 1. Gyani J Girdhar, Handbook of Healthcare quality and Patient Safety.
- 2. Brajkishore Rajoriya, Hospital and Healthcare Accreditation, Jaypee publishers.
- 3. Raandi Schmidt J. Trumbo and R. Jonson, Quality in Health Care Sector ASQC Quality Press.
- 4. Mark Graban, Lean Hospitals: Improving quality, patient safety and employee engagement.
- 5. Quality Improvement in Health Care, 2nd Ed, Nelson Thrones
- 6. Health Care Quality Management: Tools and Applications by Thomas K. Ross. ISBN: 978-1-118-50553-3.
- 7. Introduction to Healthcare Quality Management, Second Edition by Patrice L. Spath. ISBN-13: 978-1567935936.
- 8. Promising Care: How We Can Rescue Health Care by Improving It by Donald M. Berwick. ISBN: 978-1-118-79588-0.
- 9. The Healthcare Quality Book: Vision, Strategy, and Tools, 2nd Edition 2nd Edition by Elizabeth R. Ransom, Maulik S. Joshi, David B. Nash, Scott B. Ransom. ISBN-13: 978-1567933017.
- 10. Quality Management in Hospitals (2nd Edition) by S. K. Joshi, Jaypee Publishers.

- 11. Total Quality Management Aswathappa Himalaya Books House
- 12. Quality Management P. C. Tripathy
- 13. Hospital Quality Assurance: Risk Management & Program evaluation, Jesus J. Pena
- 14. Donald E. Lighter and Douglas C Fair: Quality Management in Health Care Principles and Methods, Jones and Bartlett publishers, second edition.
- 15. Daigh RD. Financial implications of a quality improvement process.
- 16. McLaughlin CP and Kalauzny AD. Total quality management in health, Healthcare management review.

Material Management in Healthcare Paper Code-HHM 206

Contacts: 3L + 1T Credits: 4

Course Overview:

The course emphasizes on developing requisite knowledge and skills in managing inventory, equipment, and drug supplies in the hospitals; describes methods of procurement, storage and distribution of drugs.

Course Objective: The objective of this course is:

To make students conversant with purchase management, inventory management and stores management.

Course Outcomes: After completing this course, the students would be able to:

CO1 Describe role and importance of inventory, logistics and supply management in health care.

CO2 Learn various techniques of inventory management including ABC, VED etc and calculating Re-order level, buffer stock and Economic Order Quantity.

CO3 Understand the processes of stock verification, condemnation and disposal.

CO4 Learn the planning, maintenance of biomedical equipments.

CO5 Understand the legal implications of letter of credits and registration and blacklisting of firms.

Course Contents:

Unit 1: Introduction to Material Management and Purchase Management

Scope, importance and objectives of Materials Management, Material Cycle. Procurement procedure, Tendering system, Different Modes of tenders, Types of purchase orders.

Unit 2: Inventory Management

Types of Inventory, Inventory Control, Lead Time, Buffer stock, Re-order level, Economic Order Quantity, Inventory ordering systems.

Inventory Control Costs –Purchase, cost, shortage cost, inventory carrying cost, inventory acquisition cost.

Inventory Control Techniques like ABC, VED, FSN, SAP and MUSIC-3D

Unit 3: Stores Management

Functioning of stores, types of hospital stores, layout and planning of hospital stores, preservation of material, duties of storekeeper and officer-in charge; Jan Aushadhi Stores; Material Codification, Process of Stock Verification, Pilferage, Stock distribution systems, criteria and methods of stock condemnation and disposal.

Unit 4: Equipment Management

Classification of Hospital Equipments, Planning & selection of Equipments, Factors affecting utilization of equipment, History Sheet of equipment, Equipment Failure, Equipment Maintenance and Repair.

Unit 5: Legal Aspects

Role of GeM (Govt. e-Market place), Registration and blacklisting of firms, Letter of Credit and its types.

- 1. N. Chapman Stephen, Introduction to Materials Management, Pearson Publications.
- 2. Inventory Control and Management, 2nd Edition by Donald Waters. ISBN: 9781118585214.
- 3. Essentials of Inventory Management by Max Muller. ISBN: 978-0814416556
- 4. Inventory Strategy: Maximizing Financial, Service and Operations Performance with
- 5. Inventory Strategy by Edward H. Frazelle. ISBN: 978-0071847179.
- 6. Supply Chain Strategy 1st Edition by Edward Frazelle. ISBN: 063-9785330219.
- 7. Inventory Accuracy: People, Processes, & Technology 1st Edition by David J. Piasecki. ISBN: 978-0972763103.
- 8. Inventory Management Explained: A focus on Forecasting, Lot Sizing, Safety Stock, and Ordering Systems by David J. Piasecki. ISBN: 978-0-9727631-1-0.
- 9. Hospital Stores Management- An IntegratedApproach, by Dr. Gupta Shakti, JaypeeBrothers.
- 10. Material Management by Dr. PawanArora, Global India Publication Pvt Ltd
- 11. Handbook of Materials Management, P. Gopalkrishnan, EasternEconomy Edition
- 12. Procurement and Materials management for Hospitals, Rex H Gregor, Harold C. Mickey

Financial Management and Accounting Paper Code- HHM 207

Contacts: 3L + 1T Credits: 04

Course Overview:

Enable the studentsto understand the basic concept of Corporate Finance, practical applications of time value of money and evaluating long term investment decisions. Develop analytical skills to select the best source of capital, its structure on the basis of cost of capital. Helps the future managers in understanding the recent trends of primary and secondary market and develop skills for application of various financial services.

Course Objectives: The objectives of this course are:

- To provide the concepts and foundations of managing finance in business enterprises.
- To provide the concepts and foundations of managing finance in business enterprises.
- To orient the students regarding financial management practices in Indian companies and Global enterprises.

Course Outcomes: After completing this course, students should be able to

CO1 Explain components of financial proposals for health care projects/studies

CO2 Describe the balance sheet and income statement in health care settings

CO3 Develop budgets for revenues, staffing and salaries, supplies and services, and equipment

CO4 Evaluate the financial status of a health service unit or department and determine the causes of performance deviation and use a variety of analytical methods to support sound business decision-making.

Course Content:

Unit1: Introduction to Finance & Corporate Finance

Finance & its scope, Financial Decisions, Sources of Finance, Time Value of Money ,Profit maximization vs. Wealth maximization, Functions of Finance Manager in Modern Age, Corporate Finance Introduction:— Nature and Scope . Concept of Risk and Return.

Unit2:Time value of Money

Compounding, Continuous Compounding, Effective Rate of Interest, Discounting – Single Cash Flows &Series of Cash Flows, Annuity – Future Value and Present Value,

Present Value of Growing Annuity, Perpetuity – Present Value, Growing Perpetuity – Present value, Equated Annual Instalments, Valuation of bonds and shares.

Unit 3: Investment Decision

Capital Budgeting Decisions: Discounting and Non discounting techniques, Calculation of Net present value (NPV) and IRR, Excel Application in Analyzing Projects.

Cost of Capital: Concept of Opportunity Cost, Cost of Debenture, Preference and Equity capital, Composite Cost of Capital, Cash Flows as Profit and components of Cash Flows, Capital asset pricing model (CAPM).

Financing Decision: Capital Structure: Relevance and Irrelevancy theory Leverage analysis – Types and Measurement along with its implications, EBIT EPS Analysis, Point of Indifference.

Unit 4: Working Capital Management

Concept of working capital, factors determining working capital, Sources of working capital, estimating working capital needs, Managing cash, marketable securities, debtors and inventory.

Dividend Decision: Factors affecting Dividend Policy, Forms of Dividends, Types of Dividend Policies, Dividend Models: Walter and Gordon Model, Miller- Modigliani (MM) Hypothesis.

Unit5: Indian Financial System

Role of Financial Institution, Primary and Secondary Market, Lease Financing, Venture Capital, Mutual Funds. Introduction to Derivatives.

Text & References:

- 1. Khan and Jain Financial Management (Tata McGraw Hill, 7th Ed.)
- 2. Pandey I M Financial Management (Vikas, 11th Ed.)
- 3. William Hakka BettnerCarcello- Financial and Management Accounting (TMH-16th Ed.)
- 4. Sheebakapil-Fundamental of financial management (Wiley, 2015)
- 5. Prasanna Chandra Fundamentals of Financial Management (TMH, 9th Ed.)
- 6. V. Rajesh Kumar, "Financial Management", Mc Graw Hill Education.
- 7. Singh and Srivastava-Business Finance (Prayagpustakbhavan 3rd Ed.)

Communication Skills-II Paper Code- HHM 208

Contacts: 2L Credits: 2

Course Overview:

This course is designed to facilitate the students to communicate effectively by emphasizing on practical communication through refurbishing their existing language skills and also to bring one and all to a common take-of level

Course Objective: The objective of this course is:

To enable students to be an integral part of corporate communication network.

Course Outcomes: After completing this course students should be able to:

CO1 Understand the scope and importance of communication

CO2 Enhance their oral and written communication skills and use different forms of written communication techniques to make effective internal and external business correspondence.

CO3 Understand the importance of listening and speaking.

CO4 Produce different types of reports with appropriate format, organization and language

CO5 Use of technology for improving the communication process.

Course Content:

Unit 1

Types of personalities- The Assertive personality-Personality Tests; Goal setting and achievement

Unit 2

EQ and IQ; Aptitude tests; Creative problem solving/Innovative thinking; Transactional analysis

Unit 3

Time management; Managing change; Conflict management; managing meetings; Attitude

Unit 4

Diversity management; Leadership and team building; Personal impact; Corporate etiquettes

Unit 5

Human behaviour and communication, its role in public health problems and solutions

Unit 6

Evidence based advocacy; Consensus building

Text & References:

- 1. Sharan J.Gerson and Steven M.Gerson "Technical Writing Process and Product" Pearson Education 2000.
- 2. Raymond V.Lesikar, John D. Pettit and Mary E.Flatley Lesikass Basic Communication Tata McGraw Will 8th Edition 1999.
- 3. Stevel. E. Pauley, Daniel G.Riordan Technical Report Writing Today AITBS Publishing & Distributors, India 5th edition 2000.
- 4. Robert L.Shurter, Effective letters in business Third Ed. 1983.
- 5. Communication Skills by Vasantha Patri
- 6. McGraith Basic Managerial Skills for all Prentice Hall of India 6th Edition 2002
- 7. Halliday, M.A. K R Hasan, Cohesion in English, Longman, London 1976

Yogic Science Paper Code -YGS 104

Contacts: 2LCredits: 2

Course Overview:

The course imparts overview of history, tradition and branches of Yoga. Students are also oriented about different types of Yoga Asanas, their importance, methods, rules, regulations and limitations.

Course Objectives: The objectives of this course are:

- To understand the basic concepts and types of Yoga
- To apply the principles of Yoga to live healthy and active lifestyle
- Promote the awareness of health through yoga
- Explain Health plans and recipes in different lifestyle diseases

Course Outcomes: On completion of this course, the students will be able to:

CO1: Explain the various definitions of Yoga, history of Yoga and branches of Yoga.

CO2: Describe kinds of Yogasanas, its importance, methods, rules, regulations and limitations.

CO3: Demonstrate knowledge of pranayamas, pranaand lifestyle, breathing and lifespan.

Course Content:

Unit 1: Introduction to yoga

- Yoga an exact science and practical system of self-culture
 History & Tradition of Yoga Yoga sutra of Pantanjali, Yoga as explained in
 Bhagvad Gita, Yoga in daily life, Yoga one of the Six Darshans (Philosophy), UN resolution and International Yoga Day
- Introduction of Hatha Yoga, Raja Yoga & Kundalini Yoga
- Eight limbs of Yoga as per Yogasutra of Patanjali Discipline/self restraint (Yama), Observance (Niyama), Posture (Asana), Restraint of breath/exercises of life force (Pranayama), Abstraction of senses/Introversion-of attention (Pratyahara), Concentration (Dharna), Meditation(Dhyana) and Super conscious state/illumination (Samadhi)
- Aphorism from Yoga Sutra: Il.29, Il.30, 11.32, Il.46, Il.49, Il.54, Ill.1, Ill.2, Ill.3 & Ill.4 defining above terms
- Introduction of Mudras, Bandhas and Shat karmas

Unit 2: Kundalini Yoga

- Seven Chakras Muladhara (att he anus), Svadhisthana, (at the root of organ of generation), Manipura (at the navel), Anahata (in the heart), Visudda (at the neck), Ajna (in the space between two eyebrows) &Sahasrara (at the crown of head)
- Nadis Ida, Pingala, Shushumna
- Awakening of Kundalini by Pranayama, Asanas & Mudras by Hathayogis and through Concentration by Rajayogins

Unit 3: Raja Yoga

- Purification and Control of mind
- Concentration: Power of concentration, Aids to Concentration, Objects for Concentration, Benefits of Concentration
- Meditation: Concrete and Abstract, Types of Meditation viz Gross (Sthoola), Subtle (Sookshma), More Subtle (Sookshanmatrara) and Most subtle (Sookshamatama), Objects of meditation, Obstacles in meditation

Unit 4: Anatomy & Physiology Of Yoga

- Effect of Yoga on skeleton & Muscular system
- Effect of yoga on physiology

Unit 5: Nutrition In Yoga

- Diet according to season (Ritucharya)
- Health plans and recipes in some lifestyle diseases

- 1. Asana Pranayama Mudra Bandha by Swami SatyanandaSaraswati. Publisher: Yoga P ublication Trust, Munger, Bihar, India
- 2. Yoga on Hypertension by Swami Shankardevanand.
 - Publisher: Yoga Publication Trust, Munger, Bihar, India.
- 3. Essence of Yoga by Swami SivanandaSaraswati.
 - Publisher: The Divine Life Society, Uttarakhand, India
- 4. Yoga Sutras of Patanjali by Swami Venkateshananda
 - Publisher: MotilalBanarsidassPublishers Private Limited, New Delhi, India
- 5. Hatha Yoga by Swami Sivananda.
 - Publisher: The Divine Life Society, Uttarakhand, India
- 6. GherandaSamhita by Swami NiranjananandaSaraswati.
 - Publisher: Yoga Publication Trust, Munger, Bihar, India
- 7. Essence of Pranayama by Dr Shrikrishna.
 - Publisher: Kaivalyadhama, Pune, India.
- 8. Dhyana Yoga by Swami SivanandaSaraswati Publisher: The Divine Life Society, Utt arakhand, India

Yogic Science Practical Paper Code- YGS 104P

Contacts:4P Credits: 2

Course Overview:

The course imparts overview of history, tradition and branches of Yoga. Students are also oriented about different types of Yoga Asanas, their importance, methods, rules, regulations and limitations.

Course Objectives: The objectives of this course are:

- To understand the basic concepts and types of Yoga
- To apply the principles of Yoga to live healthy and active lifestyle
- Promote the awareness of health through yoga
- Explain Health plans and recipes in different lifestyle diseases

Course Outcomes: On completion of this course, the students will be able to:

CO1: Learn the procedures of Pranayama and be able to execute these.

CO2: Introduce a regular and rigorous practice of yoga for lifestyle management.

CO3: Learn the procedures of different Yogasanas, Shatkarmas and be able to execute these and guide others in practice.

Course Content:

Unit 1: Asana

HATH YOGA

Unit 1:Asana

SukshmaVyayam (Joints Movement)

Backward Bending Asanas

- Sarpasana (snake pose)
- Bhujangasana (cobra pose)
- ArdhaShalabhasana (half locust pose)
- Shalabhasana (locust pose)
- Dhanurasana (bow pose)
- Kandharasana (shoulder pose)

Forward Bending Asanas

- Paschimottanasana (back stretching pose)
- JanuSirshasana (head to knee pose)
- PadaHastasana (forward bending pose)

Meditation Asanas

- Sukhasana (easy pose)
- Padmasana (lotus pose)

Vajrasana Group of Asanas

- Vajrasana (thunderbolt pose)
- Padadhirasana (breath balancing pose)
- ShashankBhujangasana (striking cobra pose)
- Ustrasana (camel pose)

Digestive/Abdominal Asanas

- Pawanmuktasana
- Uttanpadasana (raised legs pose)
- Nukasana (boat pose)

Standing Asanas

- AkarnaDhanurasana (bow and arrow pose)
- Tadasana (palm tree pose)
- TiryakaTadasana (swaying palm tree pose)
- Kati Chakrasana (waist rotating pose)
- Dwikonasana (double angle pose)
- Trikonasana (triangle pose)

Spinal Twisting Asanas

- BhuNamanasana (spinal twist prostration pose)
- ShavaUdarakarshanasana (universal spinal twist)
- ArdhaMatsyendrasana (half spinal twist)
 Balancing Asanas
- EkPadaPranamasana (one-legged prayer pose)
- Natarajasana (Lord Shiva's pose)
 Relaxation Asanas
- Shavasana (corpse pose)

Advanced Asanas

- Chakrasana (wheel pose)
- Brahmacharyasana (celibate's pose)

Unit 2: Pranayama

- Narishodhan(psychic network purification)
- Ujjayi (psychic breath)
- Kapalbhati (frontal brain cleansing breath)
- Bhastrika(bellows breath)
- Bharamri(humming bee breath)
- Surya Bhedi(vitality stimulating breath)
- Chandra Bhedi
- Sheetali (cooling breath)

Unit 3: Bandh

- JalandharaBandh(throat lock)
- UddiyanBandh (abdominal contraction)
- Moola Bandh (perineum contraction)
- MahaBandh (great lock)

Unit 4: Mudra

- Giyan Mudra (chin mudra)
- Hridaya Mudra (heart gesture)
- Bhoochri Mudra (gazing into nothing)
- Yoga Mudra (Attitude of psychic union)
- Shambhavi Mudra (eyebrow centre gazing)

Unit 5: Shat-karma

- Kapalbhati
- Neti, Jala (nasal cleaning with water)
- Agnisara (activating the digestive fire)

Summer Project Report on Hospital / Health Practices (Including Hospital/ Field Visit)

Credits: 4

Summer Training Objective:

To provide on the job experience, as an understudy in a hospital, to help the student understand systems and procedures and learn to make decisions considering the Hospital as an integral unit.

Duration: 3-4 months

Format for Report Writing

- 1. Abstract
- 2. Introduction
- 3. Aims & Objectives
- 4. Operational definitions
- 5. Significance of Study
- 6. Review of literature
- 7. Research methodology
- 8. Data Analysis
- 9. Results
- 10. Discussion
- 11. Conclusion
- 12. Recommendations
- 13. Limitations of study
- 14. Future prospects of study
- 15. References

Hospital Planning Paper Code -MHM 301

Contacts: 3L + 1T Credits: 4

Course Overview:

This course is intended to teach considerations for building healthcare facilities to enhance patient and staff safety and satisfaction. It includes steps in hospital planning, conducting master planning and pre-designing. It will impart understanding of joint commission and its considerations along with planning and designing of various clinical and support departments and their commissioning.

Course Objectives: The objectives of this course are:

- To learn various specifications to be considered while planning for hospital services
- To expose the students to planning of hospitals in a detailed manner this will include all facets of hospital planning activities.

Course Outcomes: After completing the course, students would be able to:

CO1 Strategically evaluate an organization, its present position, long-term direction, resources and competitive capabilities, and its opportunities for sustainable growth.

CO2 Generate a healthcare organizational mission statement, vision, objectives and strategic priorities.

CO3 Understand planning and operation of hospitals in detailed manner

CO4 Analyze salient healthcare industry trends for application to hospital planning.

CO5 Learn the recent advances in hospital planning like green hospitals.

Course Contents

Unit 1: Introduction to Hospital Planning

Conception of idea, formation of hospital planning team, market survey, feasibility study, selection of location. Project Report and development of Master Plan.

Conception to commissioning: site development, architect's brief and specifications, equipment planning, bed distribution, space allocation, Hospital designing and construction of building – commissioning.

Unit 2: Planning for Medical and Ancillary services

Planning the Out-patient services, Emergency services, Day care services, Inpatient services and Intensive Care Units (ICU), Surgical suites, Labor and delivery suites-LDRP suites.

Unit 3: Planning for Supportive Services

Planning the Medical Records department, Laboratory services, Blood Banking, Radiological services, Medical Store, Medical gas system, HVAC, CSSD, Food & Beverages and Laundry & linen services.

Unit 4: Planning for Advanced facilities

Planning the Cardiac catheterization laboratory, Endoscopy units, Radiotherapy unit, IVF unit and Dialysis unit.

Unit 5: Recent Advances in Hospital Planning

Green Hospitals, Energy efficiency in hospitals, Robotics in Hospitals, Geriatric Care.

Texts & References:

- 1. Modern Trends in Planning & Designing of Hospitals: Principles and Practice: Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar, Sidharth Satpathy, by Jaypee.
- 2. Principles of Hospital Administration & Planning B.M.Sakharkar, Jaypee Brothers
- 3. Hospitals: Facilities Planning and Management, GD Kunders& Gopinath, by Tata Mcgraw Hill
- 4. Hospital Planning: Charles Butler, Addison Erdman
- 5. Dr Malhotra's series: Step by Step Hospital designing & Planning, by Jaypee 2007

Organization and Management of Clinical Services Paper Code-MHM 302

Contacts: 3L + 1T Credits: 4

Course Overview:

The course provides a framework for managing Clinical Hospital Services, including Outpatients and Inpatients services, and other Critical areas of the hospital.

Course Objective: The objective of this course is:

• To enable the students gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of different clinical areas.

Course Outcomes: After completing the course, students should be able to:

CO1 Understand the processes and details related to effective patient care and to further increase the satisfaction level of patients

CO2 Gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of clinical services, support services and utility services of a hospital.

CO3Learn basic concepts related to biomedical waste management so that the students are ready for challenges of hospital management.

Course Content:

Unit 1: Hospital as a System

Introduction to hospitals, Classification and functions of Hospitals, historical development of hospitals, Role of Hospital Administrators.

Unit 2: Outpatient and Inpatient care departments

OPD: Overview of the department, its functions, location and physical facilities and Daycare services

IPD: Overview of the department, its functions, ward design considerations, nursing administration, isolation unit, Bed Occupancy rate, Average Length of stay.

Unit 3: Operation Theatres and Intensive Care Units

Organization and management of OT complex, Pre-op & Post-op area and Zoning in operation theatres, Types of ICUs, Specialized ICUs.

Unit 4: Accident and Emergency Care Unit

Physical facilities, Location and Lay-out of Emergency department, Triaging, Transportation and ambulance services, Basic Life Support and Advanced Life support ambulances.

Unit 5: Biomedical Waste Management

Bio medical waste management and Handling Rules, Classification of Biomedical wastes, Color Coding, Segregation, Collection, Transportation and Disposal of different types of BMW, Methods of disinfection; Kayakalp Initiative.

- 1. Principles of Hospital Administration & Planning: B.M.Sakharkar, Jaypee brothers Publications.
- 2. Park's textbook of Preventive & Social medicine.
- 3. Kunders G.D., Gopinath S., and Katakam A. Hospital Planning, Design and Management, Tata McGraw Hill, New Delhi, 1999
- 4. Sana's Guidelines for Hospital Infection Control By Mohd. S. Khan Jaypee Brothers, New Delhi.
- 5. Hospital Waste Management & it's Monitoring By Madhuri Sharma Jaypee Brothers, New Delhi.
- 6. Hospital Stores Management By Shakti Gupta & Sunil Kant Jaypee Brothers, New Delhi.
- 7. Medical Records, Organisation& Management By G.D. Mogli– Jaypee Brothers, New Delhi.
- 8. Mrinalini Pandey, Disaster Management, Wiley Publications.
- 9. Hospital Waste Management By A.G. Chandorkar Paras Medical Publisher.
- 10. Arun Kumar, (ed) Encyclopedia of Hospital Administration and Development, Anmol publications, New Delhi, 2000.
- 11. Srinivasan, A.V. (ed), Managing a Modern Hospital, Chapter 2, Response Books, New Delhi, 2000.
- 12. Bio medical waste act & Rules, Govt. Of India.

Organization and Management of Support & Utility Services Paper Code-MHM 303

Contacts: 3L + 1T Credits: 4

Course Overview:

The course provides a framework for health systems and managing Hospital Support Services, covering the concepts of medical tourism, provides basic knowledge of disasters and their consequent effects and basic skills of managing situations during and after disasters

Course Objectives: The objectives of this course are:

- To enable the students gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of different support and utility areas.
- To understand the processes and details related to effective patient care and to further increase the satisfaction level of patients
- To acquaint students to the concept medical tourism.
- To learn, identify and assess disasters and set-forth policies and plans for disaster preparedness.

Course Outcomes: After completing the course, students would be able to

CO1Gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of support services and utility services of a hospital.

CO2 Well versed with theBio-medical waste management.

CO3 Explain the elements of an organizational crisis and disaster plan.

CO4 Understand foundations of hazards, disasters and associated natural/social phenomena., Familiarity with disaster management theory (cycle, phases), Methods of community involvement as an essential part of successful DM

CO5: Understand the strength, weaknesses, opportunities and challenges of Medical tourism in India

Course Content:

Unit 1: Diagnostic Services

Radiology: Types of services, functional areas, radiation hazards and its preventive measures

Laboratory: Functional components of Lab, laboratory hazards, quality assessment in Labs, NABL accreditation

Blood Bank & Transfusion services: Blood donation criteria, transfusion reaction, blood components, organization of a blood donation camp.

Nuclear Medicine: Imaging Services offered, administrative and legal considerations

Unit 2: Hospital Support Services

Central Sterile Supply Department (CSSD): Functional areas, different sterilization processes, supply distribution systems.

Pharmacy Services: Role and types of pharmacies, in-patient medication management, drug distribution systems.

Medical Records Department: Types of medical records, Importance of medical records, Organizations & management of Medical Records Department; Coding, Indexing, Filing and Storage of Medical records, Statistical information and reports generated by MRD Rehabilitation services; and Mortuary Services

Unit 3: Utility Services

Management of Hospital Dietetics services, Hospital Linen and Laundry Systems, Security and Housekeeping services, Basic and Allied Engineering services.

Unit 4: Disaster Management

Classification of Disasters, Effects of disasters, Phases of Disaster Management, Fire Safety, Hospital Disaster Management Plan.

Unit 5: Medical Tourism

History of medical tourism, Medical Tourism Value Chain, Strategies to develop Medical Tourism in India, Medical Tourism Drivers and factors, Government initiatives in medical tourism.

Texts& References:

- 1. Principles of Hospital Administration & Planning: B M Sakharkar.
- 2. Modern trends in Planning and designing of Hospitals: Principles and Practice: Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar.
- 3. Hospitals: Facilities Planning and Management, GD Kunders& Gopinath, by Tata Mcgraw Hill.
- 4. Management of Hospitals: S L Goel, R Kumar.
- 5. Hospital Management in Tropics & Subtropics: James A William, McMillan, London

Strategic Management

Paper Code: MHM 304

Contacts: 3L + 1T Credit Units: 03

Course Overview:

The course provides an overview of the sub-systems, processes and models in strategic management as applicable to public health and health care organizations. Critically reviews the major environmental trends affecting healthcare organizations; internal and external environmental analysis in identifying the basis for sustained competitive advantage; SWOT; decision logic of the strategy formulation process; evaluation and selection of appropriate strategic alternatives for a healthcare organizations; and fundamental issues involved in formulation and implementation of strategies. The course provides a practical framework for controlling organizational and program strategies in public health.

Course Objectives:

- To help students in getting acquainted with basic concepts and principles of strategic management,
- To impart the strategic management conceptual framework.

Course Outcomes: After completing the course, students should be able to:

CO1 Understand the concept of strategy and strategic management process.

CO2: Explain why strategic management has become crucial in today's dynamic hospital environment;

CO3: Develop and prepare organizational strategies that will be effective for the current dynamic hospital environment.

CO4: Appreciate the significance of the general external environments impact on health care organizations;

CO5: Identify major environmental trends affecting healthcare; framework for strategy formulation;

CO6: Identify and describe the hospital's strategic posture and direction.

CO7: Do logical decision making for developing an implementation strategy in public health policy and programs.

Course Contents:

Unit 1: Introduction and Purpose of Strategy Formulation

Evolution and Introduction of strategic management. Concept and Classification of Corporate and Business Strategy with Hierarchy definition; Purpose of Strategy Formulation: Concept of Vision, Mission and Business Definition. Importance of Stakeholders in Business.

Unit 2: Strategic Analysis

PESTLE Analysis, Environmental Threat and Opportunity Profile (ETOP), Strategic Advantage Profile (SAP), Porter's Value Chain Analysis, Resource Based View of the Firm-VRIO Framework; Market Analysis-David Aaker Model, Competitor Analysis, Industry Analysis using Porter's five forces Model; Scenario analysis and SWOT Analysis. Strategic implications of company decisions and Strategic response to changes in business environment.

Unit 3:Strategic Choice – Traditional Approach

Portfolio Analysis using BCG, GE Nine Cell Matrix, Hofer's Model, Making Strategic Choices using Strickland's Grand Strategy Selection Matrix; Ansoff's Product Market Grid; Choosing Generic Strategies using Porter's Model of competitive advantage.

Unit 4: Industry Structures and Competitive Strategies

Industry Structures and Lifecycle stages, Marketing Warfare and Dominance Strategies: Advantages and Disadvantages of Defensive and Offensive strategies; Innovation as Blue Ocean Strategy.

Unit 5: Strategy Implementation and Evaluation

Issues in implementation: Resource Allocation, Organization Structure, Social responsibilities – Ethics. Measuring performance and establishing strategic controls.

Text & References:

- Wheelen and Hunger, (2008), Essentials of Strategic Management, Prentice Hall India.
- Ramaswamy and Namakumari,(1999), Strategic Planning: Formulation of Corporate Strategy Text and Cases, Macmillan India Ltd.,
- Jausch&Glueck, (1988), Business Policy and Strategic Management, McGraw Hill.
- Thomson & Strickland, (2008), Business Policy and Strategic Management, McGraw Hill.
- Pearce John 'A & Robinson R.B,(1997), Strategic Management: Strategy Formulation and Implementation, AI.T.B.S. Publishers & Distributors
- Regular reading of all latest Business journals: HBR, Business World, Business India, Business Today

Operations Research Paper Code-MHM /MHC 305

Contacts: 3L + 1T Credits: 4

Course Overview:

This course introduces the fundamentals of Operations Research Models including linear programming and applications and learn how to construct models appropriate to particular applications, develop optimal solutions, understand the theory behind solutions and translate solutions into directives for action. The course also aims to introduce quantitative methods and techniques for effective decisions—making; model formulation and applications that are used in solving public health problems.

Course Objectives: The objectives of this course are:

- To provide basic OR approach to problem solving.
- To introduce important analytical tools for managerial decision making.
- To describe the concepts of resource allocation & health service planning.
- To identify and develop operational research models from the verbal description of the real system.

Course Outcomes: After completing this course, students should be able to

CO1 Learn different techniques of managerial decision making.

CO2 Improve the objectivity of analysis

CO3 Develop a comprehensive evaluation plan for healthcare services.

CO4 Develop more effective approaches to programming.

CO5 Create awareness about optimization in utilization of resources.

CO6 Understand and apply operations research techniques in healthcare operations.

Course Content:

Unit 1: Introduction

The OR approach to problem-solving and decision-making, Definition, Scope and limitations of OR in managerial decision-making.

Unit 2: Introduction to OR Techniques

Basics of: Linear Programming, Decision Tree Analysis, Queuing theory, PERT/CPM.

Unit 3: OR Models

Basics of Replacement models, Assignment models, Inventory control models, Forecasting.

Unit 4:Applications of OR in Healthcare organizations

Resource allocation and health services planning, Deployment of health human power, Materials Management.

- 1. Operations Research Concepts, problems and Solutions, VK Kapoor, Sultan Chand & Sons.
- 2. Operations Research in Hospitals: Diagnosis and Prognosis, David H. Stimson, Ruth H. Stimson
- 3. Operations Research and Healthcare: A handbook of methods and Applications, Margaret L. Brandeau, François Sainfort, William P. Pierskalla
- 4. Patients hospitals and Operational Research, Taylor Francis
- 5. Operations Research by P. Rama Murthy
- 6. Operations Research: Methods, Models and Applications, Jay E, Aronson and Stanley Zionts
- 7. Introduction to Operations Research, Frederick S.Hillier and Gerald J. Lieberman, Tata McGraw Hill, 2005, New Delhi.
- 8. Operations Research An Introduction", Hamdy A Taha, Pearson Education, 2009, New Delhi.
- 9. Operations Research Theory and Application, J.K.Sharma, Mac Millan India, 2003.
- 10. Quantitative Techniques in Management, N.D.Vohra, Tata McGraw Hill Publishing Co. Ltd, 2007.
- 11. Operations Research, R.Paneerselvam, Prentice Hall of India, 2008, New Delhi.

Marketing Management in Hospitals Paper Code -MHM 306

Contacts: 3L + 1T Credits: 4

Course Overview:

This subject will provide an exposure to the conceptual framework of marketing in general and specific to hospitals. This learning will enable the students to understand the need, relevance and necessity of marketing in today's competitive market environment, facilitates them operationalizing and implementing marketing as an integral functions in a Healthcare scenario.

Course Objectives: The objectives of this course are:

- To provide the students exposure to modern marketing concepts, tools, and techniques, and help them develop abilities and skills required for the performance of marketing functions in hospitals.
- To give the insight into the application of marketing principles in various situations in a Hospital environment

Course Outcomes: After completing this course, students should be able to:

CO1 State the role and functions of marketing within a range of healthcare organisations. **CO2** Describe key marketing concepts, theories and techniques for analysing a variety of marketing situations.

CO3 Identify and demonstrate the dynamic nature of the environment in which marketing Decisions are taken and appreciate the implications for marketing strategy determination and implementation.

CO4 Apply the introduced conceptual frameworks, theory and techniques to various marketing contexts.

CO5Analyze the relevance of marketing concepts and theories in evaluating the impacts of environmental changes on marketing planning, strategies and practices.

Course Content:

Unit 1: Introduction to Marketing

What is healthcare marketing, concepts and scope of marketing management in healthcare, Demand States, Core concepts: Target Markets; Marketing functions, Marketing Mix; Market Place, Market space and Meta Market; Simple Marketing system, Modern Exchange Economy; Marketers and Prospects; Needs, Wants and Demands; Product Offering and Brand; Value and Satisfaction; Exchange and

Transactions; Marketing Channels& their selection; Marketing environment; Marketing Program; Selling Concept vs Marketing Concept

Unit 2: Consumer Behaviour and Market Segmentation

Consumer Behavior- concepts-Evolution of consumer oriented markets- factor influencing consumer behavior –individual factors Market Segmentation- bases for segmenting consumer markets and business markets-Target Marketing- selection of strategies-one to one –one to many marketing - Positioning for Competitive Advantage-marketing information-innovation-cases

Unit 3: Product and Services

Product Classification, Branding, Product Life Cycle, New Product Development, Product Extension Strategies.

Unit 4: Public Relations

Introduction, classification, Evaluation of public relations, public relation process, community opinion surveys and Major decisions in Marketing PR, public relation tools, role and responsibilities of public relations officer

Unit 5:Pricing

Pricing: Meaning to Buyer & Seller - pricing policies — Objective factors influencing pricing decisions - Competitors action to price changes - multiproduct pricing. Physical Distribution - Management of physical distribution, marketing risks.

Unit 6: Promotion Decisions

Promotion Decisions objectives, promotional mix, Factors affecting sales promotion, trade sales, personal selling, advertising and public relations, creative decisions in advertising.

Text & References

- 1. Marketing Management, Philip Kotler
- 2. Marketing Management, RajanSaxena, TMH
- 3. Marketing, Joel R. Evans, Wiley Dreamtech
- 4. Marketing Management & Research. P.K.Gupta. EPH.
- 5. Fundamentals of Health Care Financial Management: A Practical Guide to Fiscal Issues and Activities, 4th Edition by Steven Berger. ISBN: 978-1-118-80168-0.
- 6. Strategic Health Planning: Methods and Techniques Applied to Marketing and Management by Allen D. Spiegel. ISBN: 978-0893917425.

- 7. Marketing Management: A Strategic Decision Making Approach by V.S. Ramaswamy. ISBN-13: 978-1259026416.
- 8. Marketing Management: An Indian Perspective by Vijay PrakashAnand. ISBN-13: 978-9350042489.

Health Management Information System Paper Code -MHM307

Contacts: 3L + 1T Credits: 4

Course Overview:

The course provides an overview of Health Information Management System, its structure and functions; identifies information needs and indicators in the hospitals; describes uses of information for effective management of hospital services; describes various decision models and reviews decision making process in hospitals; application of information in performance tracking and analysis; monitoring of services and programs, supervision and impact evaluation. The course emphasizes on designing health information system and use of IT.

Course Objectives: The objectives of this course are:

- To provide knowledge on classification of information systems and health informatics
- To develop skills in identifying the information system according to hospital needs.
- To understand the various indicators of health and health information system and health management information system in hospitals.

Course Outcomes:

CO1 Describe the evolution of information technology and its uses in hospital management and delivery.

CO2 Relate the use of data and enabling information technologies in clinical outcomes management.

CO3 Evaluate the roles of information system applications common in hospitals: including electronic medical records; medical decision support; diagnostic information systems, physician practice management systems, claims processing etc

CO4 Conduct an information technology needs assessment of a hospital.

CO5 Diagram the process and critical issues related to identifying information and systems requirements and designing, developing, testing, implementing and evaluating information systems in healthcare settings.

CO6 Analyze and synthesize the ethical issues related to hospital information management and the use of information technology in hospital management and clinical practice; including privacy, confidentiality and security issues.

CO7 Analyze current and future trends in the application of information technology to the healthcare industry.

Course Content:

Unit 1

Health Management Information Systems in India, functional modules of e-hospitals Organizational Arrangements, Evaluation and application for the HMIS in India.

Unit 2Paperless Hospital management

Health records - functions, privacy and confidentiality, paper records - advantages & disadvantages, Electronic Health Records, advantages, disadvantages, bedside point of care systems, human factors and the EHR, Roadblocks and challenges to EHR implementation.

Unit 3Telemedicine

Historical perspectives, Telemedicine delivery models in India, Advantages and Barriers – SWOT Analysis of Telemedicine in India, is Future trends, Telemedicine during Covid-19 pandemic.

Unit 4Approaches to Hospital Information System

Patient based, functional organisation based, clinical information, nursing info system, appointment scheduling, dissemination of diagnostic information, registration general administration & productivity. Medical transcription - speech recognition, security, barriers and success factors in to information technology implementation.

Unit 5Software Applications in Health Care

Awareness on the application of computer software packages in various functions of Hospital. Internet and Intranet and their application in healthcare.

- 1. Management information systems Srivastava, Jaypee
- 2. Management Information Systems Conceptual foundations, structure and development, Gordon B.Davis and M.H. Olson, McGraw Hill Publishing, 1984.
- 3. Management Information System, Mahadeo Jaiswal & Monika Mital,Oxford University Press, 2005.
- 4. Management Information System Sadagopan.S, Prentice Hall India Private Limited, New Delhi 2004.
- 5. Management Information System Kenneth .C.Laudon& Jane P.Laudon Prentice Hall India Private Limited, New Delhi, 2006.
- 6. Managing with Information, Jerome Kanter, Prentice Hall India Private Limited, New Delhi, 2004, 4th Edition.
- 7. Internet: An Introduction CIS Series, Tata McGraw Hill.
- 8. Informatics for Healthcare professional Kathleen M,
- 9. Management Information system James O'Brien, Tate McGraw Hill

Women, Child and Adolescent Health Paper Code: MHC 301

Contacts: 3L + 1T Credits: 04

Course Overview:

The course is designed to respond to newly emerging issues in Mother and Child Health (MCH) and to the unique needs of the diverse communities and cultures of India and the world and to inspire students to use their skills and expertise to achieve health equity for all. This course will cover the aspects of newborn health, adolescent health, reproductive health, ante and post-natal care and what it means to make every birth wanted.

Course Objectives: The objectives of this course are 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.
- Discuss the aetiology, pathophysiology, presentation, and prognosis of women and children conditions as they present in clinical settings.
- Assess the public health impact of clinical problems for both women and children in the community, including the epidemiology of common risk factors and early intervention strategies.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Describe health across the lifecycle, from newborn to child, to adolescents and women, in areas of the world where the burden of disease is highest.

CO2: Interpret Current data on maternal and child health, distribution and determinants of health.

CO3: Discuss the role of public health programming in assessing and intervening to enhance positive parenting, breastfeeding, healthy family dynamics, healthy eating, healthy weights, growth and development in women and children.

CO4: Identify women and children at risk for poor health outcomes, particularly related to reproduction and child development and understand the importance of healthy sexual practices and family planning to maternal health.

CO5: Analyze the scheduling, indications, risks, side-effects, and impact of childhood vaccinations.

Course Content:

Unit 1: Women Health

Concepts, definition and measures; customs, norms, attitudes and practices pertaining to various aspects of women's health including menstruation, puberty, childbirth and menopause, infertility, Maternal mortality ratio, Antenatal Care

Unit 2: Child Health:

Care of children from infancy to childhood; Growth and development; Child health & morbidity, Under-five child mortality, infant and neonatal mortality rate, Breastfeeding, weaning and supplementary feeding

Unit 3: Child Health Initiatives in India

Programmes and policies related to child health and development (ICDC scheme, Child survival and safe motherhood program) Facility based newborn care, health of physically and mentally challenged children, behavioural disorders, child abuse. handicapped children.

Unit 4: Adolescent Sexual Health & Family Planning

Adolescent sexual health & contraception, methods of family planning, measurement and service delivery, quality of family planning care, adolescent health Programmes (Rashtriya Kishor SwasthyaKaryakram; Balika Samridhi Yojana; Adolescent Friendly Health Services)

Unit 5: Introduction to RMNCH+A

Introduction to reproductive health and RMNCH+A services – historical context, evolution, coverage and innovations, Various components of service delivery under RMNCH+A (5 X 5 matrix).

- 1. Dutta DC 2005. Textbook of Obstetrics and Gynecology, Rawat Pub.
- 2. Gupta SD 2005. Adolescent and Youth reproductive health in India.
- 3. Jejeebhoy S. 1998. Adolescent sexual and reproductive health in India: review of the evidence from India. Social science and medicine; 46-10.
- 4. Lancet Series on Child Survival 2003
- 5. Lancet Series on Neonatal Health care 2005
- 6. Powell JL. 2003 Theorizing Social gerontology
- United Nations International Research and Training Institute for the Advancement of Women (INSTRAW). 2003. The Situation of Elderly Women Available Statistics and Indicators
- 8. Behraman R, Kliegman R, Jenson Hal (Edt) 2001.Nelson's Textbook of Pediatrics. Harcourt Pub.
- 9. Guyton Arthur C., 1991, Textbook of Medical Physiology, A Prism Book Pvt. Ltd. Bangalore
- 10. Samson Wright's Applied Physiology, Oxford University Press, Delhi.
- 11. Handbook of Family Planning and Reproductive Healthcare by Anna Glasier. Churchill Livingstone.
- 12. Health communication: lessons from family planning and reproductive health by Phyllis Tilson Piotrow.

- 13. Oxford Handbook of Reproductive Medicine and Family Planning by Enda McVeigh, John Guillebaud, Roy Homburg. Oxford University Press.
- 14. India's Family Planning Programme: Policies, Practices and Challenges by Leela Visaria, Rajani R. Ved. Routledge Publications

National Health Programs Paper Code: MHC 302

Contacts: 3L + 1T Credits: 04

Course Overview:

The course aims to develop requisite knowledge and understanding of Indian health systems and policies, health programs, health sector reforms and experiences. Overall the course provides national perspective of health systems and program, and their historical background.

Course Objectives: The objectives of this course are to:

- Provide information about the background objectives, action plan, targets, operations, achievements and constraints of various National Health Programs in the country.
- Understand the concepts underlying the design of health programs
- Explain basic approaches to design health programmes, with a focus on low resource settings.

Course Outcomes: On completion of this course, the students will be able to

CO1: Demonstrate a thorough understanding and comprehension of public health programs and policies.

CO2: Determine planning, implementation, and evaluation of health programs for individuals and populations.

CO3: Analyze essential services that public health programs provide to protect and improve the health of populations.

CO4: Determine the elements to improve health outcomes and systems.

CO5: Design the methods of assessing the health impact of different programs.

Course content:

Unit 1: Key Health Committees

Bhore committee, Mudliar committee, Mukherjee committee, Chaddah committee, Jungalwala committee, Kartar Singh Committee, Srivastava committee

Unit 2: Reproductive, Maternal, Neonatal, Child and Adolescent health

Janani Shishu Suraksha Karyakaram (JSSK), Rashtriya Kishor SwasthyaKaryakram(RKSK), Rashtriya Bal SwasthyaKaryakram (RBSK), Universal ImmunisationProgramme, Mission Indradhanush / Intensified MissonIndradhanush, Janani Suraksha Yojana (JSY), Pradhan Mantri SurakshitMatritva Abhiyan (PMSMA), NavjaatShishu Suraksha Karyakram (NSSK), National Programme for Family planning

Unit 3: National Nutritional Programmes

National Iodine Deficiency Disorders Control Programme, MAA (Mothers' Absolute Affection) Programme for Infant and Young Child Feeding, National Programme for Prevention and Control of Fluorosis (NPPCF), National Iron Plus Initiative for Anaemia Control, National Vitamin A prophylaxis Programe, Integrated Child Development Services (ICDS), Mid-Day Meal Programme

Unit 4: Communicable diseases

Integrated Disease Surveillance Programme (IDSP), Revised National Tuberculosis Control Programme (RNTCP), Malaria Eradication ProgramNational Leprosy Eradication Programme (NLEP), National Vector Borne Disease Control Programme, National AIDS Control Programme (NACP), Pulse Polio Programme, National Viral Hepatitis Control Program, National Rabies Control Programme, Guinea worm Eradication Program,

Unit 5: Non-communicable diseases

National Tobacco Control Programme(NTCP), National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS), National Programme for Control Treatment of Occupational Diseases, National Programme for Prevention and Control of Deafness (NPPCD), National Mental Health Programme, National Programme for Control of Blindness Visual Impairment, National Programme for the Health Care for the Elderly (NPHCE), National Programme for Prevention & Management of Burn Injuries (NPPMBI), National Oral Health programme

Unit 6: Health system strengthening programs

Ayushman Bharat Yojana, Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), National Health Mission (NRHM and NUHM).

- 1. GOI 2005, National Rural Health Mission: *Meeting People's Health needs in rural areas*, Framework for implementation, 2005-2012, MoHFW.
- 2. GOI 2005, Report of National Commission on Macroeconomics and Health, MoHFW.
- 3. Kishore, J. (2012). National health programmes of India: National policies and legislations related to health. *Peer-reviewed, Official Publication of the Indian Academy of Geriatrics*, 165.
- 4. GOI, MoHFW, Annual Report of various years.

Public Health Planning & Management Paper Code: MHC 303

Contacts: 3L + 1T Credits: 04

Course Overview:

The course provides basic concepts and principles of public health management prepares professionals to enrich their knowledge about NGOs, different types of NGOs, essential features and management of NGOs at local, national and international levels. It inculcates learning opportunities for developing program management skills, and translate the modern management concepts in to public health program planning and management.

Course Objectives: The objectives of this course are to:

- Train the students in health program design management with special focus on formulation, implementation, monitoring and evaluation.
- Identify and apply appropriate statistical methods to analyse and describe a public health program.
- Demonstrate how to apply the principles of leadership, policy development, budgeting and program management in the planning, implementation and evaluation of health programs for individuals and populations.
- To understand the basic concepts and principles involved in managing NGOs.
- To enhance knowledge on project proposal writing and maintenance of the accounts in NGO's.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: Describe the need for health planning, concept and process of health planning..

CO2:Understand the concepts underlying the design of Health programs.

CO3: Determine log frame and indicators for monitoring the program.

CO4: Design systematic and time bound action plans and framework to evaluate the effectiveness of health program implementation

CO5: Understand the management of NGOs and the role of NGO's in community development.

CO6: Demonstrate knowledge and understanding the role of Public Health in disaster situations.

Course content:

Unit 1: Health Planning

Need for health planning, Concept of programme planning, problem identification and priority setting, Process of planning, Community involvement in planning.

Unit 2: Health program designing

Concepts underlying the design of Health programs, Basic approaches to the design, analysis and Interpretation of health programs, evolving a logical framework - setting goals, objectives and targets. Feasibility analysis and budgeting, Plan implementation

Unit 3: Monitoring and evaluation

Framework to evaluate the effectiveness of health program implementation , Process, outcome and impact evaluation.

Unit 4: Disaster Management

Classification of Disasters, Effects of disasters, Phases of Disaster Management, Fire Safety, Impact of disasters on Hospitals, Hospital Disaster Management Plan.

Text and References

- 1. Shirley, D. (2016). Project management for healthcare. CRC Press.
- 2. Longest Jr, B. B. (2004). *Managing health programs and projects* (Vol. 5). John Wiley & Sons.
- 3. Yogan Pillay, Timothy H. Holtz, *Textbook of International Health: Global Health in a Dynamic World* 3 rd Edition. Oxford University Press.
- 4. Paul F. Basch. Textbook of International Health, Oxford University Press
- 5. Michael Seear, *An Introduction to International Health*, Published by Canadian Scholars Press Inc. 5. Manoj Sharma, Ashutosh Atri.(2010). *Essentials of International Health* Jones Bartlett Learning
- 6. Clark John. (1991). Voluntary Organizations: Their Contribution to Development. London: Earth Scan.
- 7. Jain R.B. (1995). NGO's in Development Perspective. New Delhi: Vivek Prakasan
- 8. Sakararan and Rodrigues. (1983). Handbook for the Management of Voluntary Organization. Madras: Alfa
- 9. Behera M. C. (2006). Globalizing Rural Development. New Delhi: Sage.
- 10. Chowdhry Paul. (1973). Administration of Social Welfare Programmes in India. Bombay: Somaiy.
- 11. NGO's and Rural Development Theory and Practice. New Delhi: Concept.
- 12. Julie Fisher. (2003). Non-Governments NGO's and the Political Development of the Third World. New Delhi: Rawat
- 13. Mrinalini Pandey, Disaster Management, Wiley Publications.

Health Promotion Approaches and Management Paper Code MHC 304

Contacts: 3L + 1T Credits:04

Course Overview:

The course gives students an understanding of health promotion at individual, group, community and national levels, as well as their critical thinking around the social determinants of health approaches to health interventions.

Course Objective: The objective of this course is to

Introduce different models of communication for use in health promotion activities and community based activities.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: Describe the role and importance of communication in health care.

CO2: Identify steps communication planning process and develop a health communication plan and strategy.

CO3: Analyze matrix of targeted behaviour, audience, key messages, media choice, indicators of change.

CO4: Describe dimensions of Interpersonal Communication and PLOT.

CO5: Describe approaches to Media Advocacy, basic principles and approaches to Counselling.

Course Content:

Unit 1: Basics of Health Communication and Health Education

Communication Process, Functions and Types, Barriers to communication, Methods of Health Communication, Mass communication, Doctor patient communication, Community Participation – Concepts and Types; Health Education – its approaches, principles and models.

Unit 2: Social and Cultural Context to Health

Health Belief Model, Culture and Health, Cultural Competency, Sociology and Health, Social determinants of Health, Approaches to social perspectives on Health, Medical Anthropology, Factors influencing Healthcare service utilization, Biopsychosocial Model.

Unit 3: Information, Education and Communication (IEC) Strategies

IEC situation assessment – methods of data collection, Different Mediums of communication and their advantages & disadvantages, Education material development and dissemination; IEC program planning, implementing, monitoring and evaluating; District infrastructure of IEC

Unit 4: Behaviour Change Communication

Factors influencing behavior, Phases of Behavior Change, Developing effective behavior change communication, Target Audience Segmentation.

Text and References

- 1. Ahmed Manzoor. *Community Participation: The Heart of Primary Health Care*, International council for education, Essex.
- 2. Bhat Anil. Community-involvement in Primary Health Care, Public systems group, IIM.
- 3. *Behaviour Change through Mass communication*, AIDS control and prevention Project, Family Health International, USAID.

Environment and Occupational Health Paper Code: MHC 306

Contacts: 3L + 1T Credits: 04

The course examines health issues, scientific understanding of causes, and possible future approaches to control the major environmental and occupational health problems in industrialized and developing countries. It includes how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.

Course Objectives: The objectives of this course are to:

- Provide the comprehensive knowledge in issues related to environment affecting health, sanitation and means of sustainable development.
- Describe the history of hygiene and environmental health and its development in the country.
- Explain the significance of environmental health and the basic components and purpose of environmental health planning.
- Teach basic concepts of Occupational Health & discuss about various occupational diseases and their prevention and demonstrate the contemporary issues surrounding occupational safety and health.

Course Outcomes:

On completion of this course, the students will be able to

CO1:Define the major environmental agents i.e. environmental chemical, biological, and physical agents that cause adverse effects on human health and their sources.

CO2: Discuss the transport and fate of environmental agents in the environment, and identify the carriers or vectors (air, water, soil, and food) that promote the transfer of these agents from the environment to the human.

CO3: Describe the toxico-kinetics and toxico-dynamics of environmental agents in the body, including the effect of route of entry (inhalation, ingestion, absorption).

CO4: Identify and solve occupational safety and health problems.

CO5: Determine professional and ethical responsibility in occupational safety and health.

CO6: Design a system, process, or program to meet occupational safety and health needs.

Course content:

Unit 1:Environmental Pollution

Air pollution: Pollutants and their resources, effects on human health, air pollution control legislation.

- Noise pollution: sources and effects, control measures.
- Water pollution: sources, classification of water pollutants, Sewage and agricultural run off, inorganic pollutants suspended solids and sediments, radioactive materials, purification of water and waste water treatment.
- Central Pollution Control Board (CPCB) guidelines

Unit 2: Environmental health impact assessment

Climate Change & Health, Lifestyle and dietary effects on health and food safety, Management of environmental hazards.

Unit 3: Waste management

Biomedical Waste management: classification, methods of treatment and disposal-compositing, sanitary land filling, thermal process, recycling and reuse, Hazardous waste management: sources, treatment and disposal.

Unit 4: Introduction to occupational health

Definition & history of occupational health, Principles of occupational health & Ergonomics.

Unit 5: Occupational Diseases:

Definition; classification on the basis of physical agents, chemical agents, biological agents; occupational diseases of skin, respiratory system; occupational diseases due to microorganisms; Occupational Poisoning; Laws related to occupational health; recommendations of National institute for occupational safety and Health; Prevention of occupational hazards

Text and references:

- 1. Moeller, D. W. (2004). Liquid waste. *Environmental health. 3rd Edn.*, Harvard University press, Combridge, MA., ISBN-10: 0-674-01, 494-4.
- 2. Baxter, P., Aw, T. C., Cockcroft, A., Durrington, P., & Harrington, J. M. (2010). *Hunter's diseases of occupations*. CRC Press.
- 3. Julian Smedlay Oxford Text Book Of Occupational Health(2nd edition)
- 4. Levy, B. S. (Ed.). (2006). Occupational and environmental health: recognizing and preventing disease and injury. Lippincott Williams & Wilkins.
- 5. Park, K., & Park, K. (2015). Text Book of Preventive and Social Medicine, M/s. *Epidemiology of chronic non-communicable diseases and conditions. 23rd ed. Jabalpur.* M/s BanarsidasBhanot publishers.

Health Information System Paper Code -MHC 307

Contacts: 2L Credits: 04

Course Overview:

The course provides an overview of Health Information Management System, its structure and functions; identifies information needs and indicators in the hospitals; describes uses of information for effective management of hospital services; describes various decision models and reviews decision making process in hospitals; application of information in performance tracking and analysis; monitoring of services and programs, supervision and impact evaluation. The course emphasizes on designing health information system and use of IT.

Course Objectives:

- To provide knowledge on classification of information systems and health informatics
- To develop skills in identifying the information system according to hospital needs.
- To understand the various indicators of health and health information system and health management information system in hospitals.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: Describe the evolution of information technology and its uses in healthcare management and delivery.

CO2: Discuss the role of information system applications common in health organizations: including electronic medical records; medical decision support; diagnostic information systems, physician practice management systems, claims processing etc

CO3: Analyze an information technology needs of a healthcare organization and diagram the process and critical issues related to identifying information and systems requirements and designing, developing, testing, implementing and evaluating information systems in healthcare settings.

CO4: Illustrate the ethical issues related to healthcare information management and the use of information technology in health management and clinical practice; including privacy, confidentiality and security issues.

CO5: Analyze current and future trends in the application of information technology to the healthcare industry.

Course Content:

Unit 1:

Health Management Information Systems in India, functional modules of e-hospitals Organizational Arrangements, Evaluation and application for the HMIS in India.

Unit 2:

Paperless Hospital management: Health records - functions, privacy and confidentiality, paper records - advantages & disadvantages, Electronic Health Records, advantages,

disadvantages, bedside point of care systems, human factors and the EHR, Roadblocks and challenges to EHR implementation.

Unit 3:

Telemedicine - Historical perspectives, types of technology, Tele-health delivery models in India, advantages and barriers of telehealth, future trends, knowledge management.

Unit 4:

Approaches to Hospital Information System: patient based, functional organisation based, clinical information, nursing info system, appointment scheduling, dissemination of diagnostic information, registration general administration & productivity. Medical transcription - speech recognition, security, barriers and success factors in to information technology implementation.

Unit 5:

Software Applications in Health Care - Awareness on the application of computer software packages in various functions of Hospital. Internet and Intranet and their application in healthcare.

Text and References:

- 1. Management information systems Srivastava, Jaypee
- 2. Management Information Systems Conceptual foundations, structure and development, Gordon B.Davis and M.H. Olson, McGraw Hill Publishing, 1984.
- 3. Management Information System, Mahadeo Jaiswal & Monika Mital,Oxford University Press, 2005.
- 4. Management Information System Sadagopan.S, Prentice Hall India Private Limited,
- 5. New Delhi 2004.
- 6. Management Information System Kenneth .C.Laudon& Jane P.Laudon Prentice Hall India Private Limited, New Delhi, 2006.
- 7. Managing with Information, Jerome Kanter, Prentice Hall India Private Limited, New Delhi. 2004. 4th Edition.
- 8. Internet: An Introduction CIS Series, Tata McGraw Hill.
- 9. Informatics for Healthcare professional Kathleen M,
- 10. Management Information system James O'Brien, Tate McGraw Hill

KPO Management Paper Code-HHM 401

Contacts: 2L Credits: 02

Course Overview:

The course would acquaint the students with the outsourcing, knowledge process outsourcing, carious aspects of outsourcing etc.

Course Objectives: The objectives of this course are:

- To understand the concepts and scope of KPO management.
- To learn about reasoning and aptitude based cases.
- To understand the scope of KPO in Pharmaceutical Management
- To understand the business analytics and competitive intelligence

Course Outcomes: On completion of this course, the students would be able to:

CO1 Understand the concept of high added value process chain in KPOs.

CO2 Attain in depth knowledge on aspects related to KPO in health sector

CO3 Understand role of various processes as market research and R&D in KPO

CO4Understand the concept of transfer of knowledge intensive business processes

Course Content:

Unit 1: Outsourcing

Introduction to outsourcing, types of outsourcing, Outsourcing Development phases, ICT opportunities, IT and Outsourcing, Need and benefits of Outsourcing, outsourcing risks, Outsourcing success factors, Process of Outsourcing, Outsourcing Network, Outsourcing Drivers, Trends of Outsourcing, Pricing models in outsourcing, Strategic decision to outsource, Emerging opportunities in outsourcing industry.

Unit 2: Knowledge Process Outsourcing

Introduction, Global Scenario, Knowledge Process Outsourcing in India, Key players in Indian outsourcing industry, Strategic Knowledge process outsourcing, KPO industry of India, Growth drivers of Indian KPOs.

Unit 3: Mental Aptitude and Reasoning

Aptitude Test, Logical Reasoning (Logical Puzzles, Missing letters puzzles, Chain rule, Odd man out series, Time and distance, statement assumption, Letters and symbol

series), Case studies, Verbal Ability (spotting errors and ordering of words), Business analytics and forecasting and Competitive Intelligence.

Text & References:

- 1. Gopal R, Manjrekar Pradip BPO/KPO Management: An Industry, by Excel Books
- 2. Amit Singh Sisodiya; Knowledge Process Outsourcing: Advantage India; ICFAI University Press.
- 3. VivekDeolanker; Business Process Outsourcing and Knowledge Process Outsourcing;

Hospital Accreditation Paper Code-HHM402

Contacts: 2L Credits: 02

Course Overview:

The course introduces the students to the hospital quality accreditations available nationally & globally and the process of getting started on the road to accreditation.

Course Objectives: The objectives of this course are:

- The students would be able to develop norms and standards for hospitals, and adopt
 means of evaluation of hospitals so as to improve the quality of healthcare in the
 community.
- To analyse the requirements of accreditation process
- To be able to undertake professional consultancy in the field of Quality and accreditation.

Course Outcomes: After completing this course, students should be able to

CO1Analyze the requirements of accreditation process

CO2 Understand the process of getting started on the road to accreditation

CO3 Learn about the National and International Accreditation bodies, overview of standards, Raising the quality of care for the Patient

Course Content:

Unit 1: NABH Accreditation

Introduction To NABH, Access, Assessment & Continuity of Care (AAC), Care of Patients (COP), Management of Medication (MOM), Patient Rights & Education (PRE), Hospital Infection Control (HIC), Continual Quality Improvement (CQI), Responsibilities Of Management (ROM), Facility management & Safety (FMS), Human Resource Management (HRM), Information Management System (IMS), Documentation Requirements & Implementation Guidelines, Accreditation Process, Final Assessment

Unit 2: JCI Accreditation

Overview of JCI Accreditation and its process, Comprehensive coverage of JCI accreditation chapters for hospitals, and documentation requirements.

Text and Reference:

- 1. BrajkishoreRajoriya, Hospital and Healthcare Accreditation, Jaypee publishers
- 2. Self-Assessment Toolkit, NABH.

Entrepreneurship Management Paper Code-HHM 403

Contacts: 2L Credits: 02

Course Overview:

This course enables students to understand the nature and scope of entrepreneurship, Innovation and its role in the current scenario.

Course Objectives: The objectives of this course are:

- To impart basic managerial knowledge and understanding the business environment.
- To develop necessary knowledge and skills to be an entrepreneur.
- To develop, strengthen the entrepreneurial quality and motivation.
- To analyze the environmental issues related to the proposed project and deliver the best in the circumstances.

Course Outcomes: On completion of this course, the students will be able to

CO1 Understand the concept, nature and scope of entrepreneurship

CO2 Understand the function of the entrepreneur in the successful, commercial application of innovations

CO3 Identify personal attributes that enable best use of entrepreneurial opportunities

CO4 Explore entrepreneurial leadership and management style

Course Content:

Unit 1: Entrepreneur and Entrepreneurship

Definition of Entrepreneur, Entrepreneurial motivation and barriers; Internal and external factors; Types of entrepreneurs; Theories of entrepreneurship; Classification of entrepreneurs. Characteristics of Entrepreneur.

Unit 2: Idea Generation and Project Formulation

Idea Generation, Screening and Project Identification, Feasibility Analysis; Project Planning, Evaluation, Monitoring and Control, Project Report Preparation, Launching and Organizing and organizing an Enterprise; Operation problems: Incubation and Takeoff, Problems encountered, Structural, Financial and Managerial Problems, Types of Uncertainty.

Unit 3: Supportive Agencies for Entrepreneurship

Institutional support for new ventures; Supporting organizations; Incentives and facilities; Financial Institutions and Small scale Industries, Govt. Policies for SMEs. Role of SIDBI & NSIC

Text and References:

- 1. Couger C, Creativity and Innovation, IPP, 1999.
- 2. Jacob Nina, Creativity in Organisations, Wheeler, 1998.
- 3. Velasquez, Business Ethics- Concepts and Cases, Prentice-Hall, 5th edition, 2002.
- 4. Kittson Alan, Ethical Organisation, Palgrave, 2001.

NGO'S Management Paper Code: HHM 404

Contact Hours: 2T Credits: 02

Course Overview:

The course provides insight of the role of NGOs in health and development; NGO concepts and philosophy; managerial challenges faced by non-government organizations; administrative, financial and organizational aspects of non-profit organizations. Familiarize with the core competencies and provide opportunities for management of NGOs. The course also covers the basic approaches of community participations and work being done by them, Community Based Organization (CBOs) and development partners in this respect.

Course Outcomes: After completion of this course, students will be able to:

CO1: Explain role of NGOs in health and development, and community mobilization;

CO2: Describe management and organizational issues and problems in NGO management;

CO3: Skills for setting up goals and management systems for functioning of NGO;

CO4: Legal and institutional aspects of formation of NGO evaluation of performance of NGOs.

Course Contents:

Unit 1: Introduction to NGOs

Definition, Classification, Objectives and Functions of NGOs, Vision, Mission and Goals in NGOs - Role of NGO's in Community Development, issues in NGO management,

Units 2: Legal Aspects

Trusts and Societies with Special reference to Trust and Society Registration Acts, Foreign contributions and Regulation Act (FCRA), Process in NGO Registration.

Unit 3: Fund raising

Methods and Techniques of Fund Raising – International, National and Local Levels

Texts and References:

Public Health Nutrition Paper Code: HHM 405

Contacts: 2L Credits: 02

Course Overview:

This course prepares professionals to apply nutrition principles in evidence-based interventions to promote healthy nutrition practices in populations and to focus on interactions between nutrition and health, including nutritional epidemiology, obesity prevention and intervention strategies for impacting health through nutrition.

Course Objective: The objectives of this course are to

- Explain the basics of human, community nutrition and issues related to food safety.
- Apply nutrition indicators for different public health purposes, including: estimating prevalence, monitoring and surveillance, and investigating diet and disease relationships.
- Use evidence-based knowledge to develop nutrition programs and interventions for diverse populations

Course Outcomes:On completion of this course, the students will be able to

CO1: Outline the acquisition of public health nutrition knowledge and skills.

CO2: Analyzehow to select information efficiently and effectively for public health practice.

CO3: Illustrate the administration of population-based food, nutrition and health services.

CO4: Determine interactions between nutrition and health, including nutritional epidemiology, obesity prevention and intervention strategies for impacting health through nutrition.

CO5: Apply epidemiological concepts of human nutrition in order to improve population health and reduce disease risk.

Course Content:

Unit 1: Basics of Nutrition

Classification of Foods by origin, chemical composition, predominant function & by nutritive value; Nutrients: Macro & Micro nutrients, Nutritional profiles of Principle Foods, Assessment of Nutritional status.

Unit 2: Disease specific nutrition

Nutritional Requirements, Diet modifications during various diseased condition – diabetes, obesity, heart diseases, civil and kidney, TB, HIV etc, Deficiency disorders & dietary management – PCM, anaemia, goitre and vitamin & mineral deficiency.

Unit 3: Community nutrition

Nutritional problems in Public Health, Nutritional surveillance, Prevalence of under nutrition and malnutrition in India, Malnutrition infection and infestation, effect of malnutrition in infancies, pregnant and lactating mothers, Nutrition organization programmes — national,

international & voluntary organizations undertaken to combat malnutrition, policy &programmes for nutrition related issues and Balanced diet for preschool going children adolescents, pregnant and lactating mothers, old age & athletes.

Unit 4: Food Safety

General principles of Hygiene, importance of food borne illness, prevention of contamination, food intoxicants, food additives, food standards, importance of safe drinking water, purification methods, Food borne diseases, Prevention of Food Adulteration Act 1954 and National Nutrition Policy 1993.

Text & References:

- 1. Dr. M Swaminathan. *Advanced textbook on food and Nutrition*, Bangalore Publishing Co. Ltd., 1974
- 2. C Gopalan. Recent Trends in Nutrition, Oxford University Press, 1993.
- 3. E. Savage King. Nutrition for Developing Countries, Oxford University Press, 1992.
- 4. Dr. C. Gopalan. Nutrition problems and Programmes in South East Asia, WHO, 1987.
- 5. Sumati R. Mudambi, M.V. Rajagopal, V.R. Damodharan Fundamentals of food and Nutrition, Wiley Eastern Ltd., 1982.
- 6. Nutritional Sciences: Sreelakshmi

International Health Management Paper Code: HHM 406

Contacts: 2L Credits: 02

Course Overview:

The course will provide the requisite knowledge and understanding of global health systems and policies, disease burden, health inequalities and global health scenario.

Course Objectives: The objectives of this course are to

Identify and analyse global and local burden of disease, determinants of health and origin of disease with special reference to the role of gender, vulnerable groups, and the interrelationship with poverty and in the context of war, disaster and refugee situations.

Course Outcomes:

On completion of this course, the students will be able to

CO1:

Analyse health risks and diseases from an epidemiological perspective, perform simple surveys and establishing reporting systems for disease surveillance and control. **CO2:** Appraise different systems for health care delivery, logistic issues in health care delivery, and identify international actors and their roles in health care and humanitarian action.

CO3: Identify and analyse the role of the main infectious diseases, emerging infections and epidemic outbreaks, and to organise primary and secondary prevention on different levels in the health care organisation in collaboration with other sectors in the society.

Course Content:

Unit 1: Global public health

Global burden of diseases Demographic, epidemiological and nutritional transition Social determinants of health, gender and health Climate change and health

Unit 2: Health systems and management

Health care systems, health care in different societies and cultures International and national politics and actors Public and private service providers

Unit 3: Medical and Wellness tourism

History of Medical tourism, Global Medical tourism scenario, Medical tourism value chain, Medical tourism drivers, Wellness tourism, Impact of medical tourism on public health

Unit 4: Global Trends

Sustainable Development Goals and Millennium Development Goals, Changing global health policy environment and Factors influencing public policies, Role of International Agencies viz. WHO, UNFPA, UNICEF services in health sector.

Text and References:

- 1. K Park, Preventive and Social Medicine, BansaridasBhanot Publishing House.
- 2. Maxcy-Rosenau-Last, Public Health & Preventive Medicine, 14th Edition Ed Robert Wallace.
- 3. Hogan MC, Kyle J et al. Maternal mortality for 181 countries, 1980–2008: a systematic analysis of progress towards Millennium Development Goal
- 4. Laurie Garrett 2007, "The Challenge of Global Health"
- 5. Laurie Garrett 2012, "Global health hits crisis point"

Project Work & Dissertation Report Paper Code- HHM 407

Credits: 16

Internship Objective:

To impart the practical knowledge through research methods, help formulate a rigorous research problem related to hospital on the basis of their observation, help do an independent study, and encourage working in a team.

Pedagogy:

- Identifying several situations amenable to dissertation work, writing a proposal and making a presentation to the Departmental Research Committee.
- Reporting to the committee on the progress of research work periodically.
- Making use of a variety of research methods.
- Defending the inference before the Examining Committee.

Dissertation Report Contents:

Every student will do a detailed study on the topic selected for the dissertation, and is expected to prepare a two or three proposals which he intends to take up for the Dissertation. The Assigned guide will examine this and decide on the topic of dissertation. Report will comprise of following contents:

- 1. Abstract
- 2. Introduction
- 3. Aims & Objectives
- 4. Operational definitions
- 5. Significance of Study
- 6. Review of literature
- 7. Research methodology
- 8. Data Analysis
- 9. Results
- 10. Discussion
- 11. Conclusion
- 12. Recommendations
- 13. Limitations of study
- 14. Future prospects of study
- 15. References

DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY

(Approved by UGC under section 2f of UGC Act)



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