

Executive-Master of Hospital Administration (Working Professionals) Three-Year Part-Time

Syllabus - First Semester

MANAGEMENT PROCESS & ORGANIZATIONAL BEHAVIOUR

Course Code: HAP4101

Credit Units: 03

Course Objective: To provide the student understand Human Behaviour in organizations so as to improve his managerial effectiveness. The subject encompasses management principles, functions and processes, discussing their significance and role in effective and efficient management of health care organizations.

Course Contents:

Module-I: Features of Management

Growing significance of management in organizations; Evolution of Management Thought- Frederic Taylor's scientific Management, Henry Fayol's principles of management, concept of bureaucracy, Behavioral approach, Systems theory of organization, Contingency Theory of organization, Management by Objectives (MBO).

Module-II: Management Functions

Management process and functions - Planning, Organizing, Staffing, Directing, Coordinating and Controlling

Module-III: Organization Concepts and Processes

Nature and structure of organization, Types of organizations, Line and Staff Relationships; Decision-Making Process, Leadership

Module-IV: Behavioral Concepts and Theories

Cognitive process, Perception process and its stages, Creativity and problem solving; Motivation process, Conflict management, Team building, Concepts of organization Behavior, Personality development, transactional analysis, Management ethics, Corporate Social Responsibility

Examination Scheme

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Text and References

- Koontz 'O' Donnel and Weirch: *Management* (Tokyo, McGraw Hill).
- Last and Tensenzing: *Organisation and Management* (New York: McGraw Hill 1980).
- Peter F. Drucker: *The Practice of Management* (Bombay: Allied Publishing Co., 1989).

- Fred Luthans. *Organisational behavior*, McGraw Hill Co., Tokyo.
- Keith Davis. *Human Behavior at Work*, Tata McGraw Hill, New Delhi.
- Abraham K.Karmam. *Organizational Behavior*, Prentice Hall, New Delhi.
- StephinP.Robbins. *Organisational Behavior*, Prentice Hall New Delhi

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HOSPITAL PLANNING

Course Code: HAP4202

Credit Units: 03

Course Objective

To expose the students to planning and operation of hospitals in a detailed manner which will include all facets of hospital planning activities covering every department that is involved both in clinical care as well as supportive services.

Course Contents

Module-I: Introduction to Hospital Planning

Conception of idea, formation of hospital planning team, market survey, feasibility study, selection of location, Financial planning of hospitals, Macro level planning, Conception to commissioning- site development, architects brief working drawings and specifications, engineering drawing, equipment planning, bed distribution, space allocation, interior designing and construction of building - commissioning, shake down period

Module-II: Planning for Medical and Ancillary services

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

Module-III: Planning for Supportive Services

Admitting department, Medical Records department, Laboratory services, blood banking & Radiological services, Pharmacy & Medical store, Medical gas system, HVAC, CSSD, Food & Beverages and Laundry & linen services.

Module-IV: Planning for Advanced facilities

Cardiac catheterization laboratory, various endoscopy units, Radiotherapy unit, IVF unit and Dialysis unit.

Module-V: Recent Advances in Hospital Planning

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

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Modern Trends in Planning & Designing of Hospitals: Principles and Practice:* Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar, SidharthSatpathy, by Jaypee – 2007
- *Hospitals: Facilities Planning and Management,* GD Kunders by Tata McGraw Hill
- *Hospital Planning:* Charles Butler, Addison Erdman
- Dr Malhotra's series: *Step by Step – Hospital designing & Planning,* by Jaypee 2007

BIOSTATISTICS

Course Code: HAP4204

Credit Units: 3

Course Objective: The aim of this course is to develop the understanding of various statistical tools used for decisions making and how each applies to and can be used in the Hospital environment.

Course Contents:

Module-I: Introduction

Classification of data, Source of data, data organization Method of scaling - nominal, ordinal, ratio and interval scale, building composite scales, measuring reliability and validity of scales.

Module-II: Properties of measurement & Probability distributions

Measurement of central tendency, measurement of dispersion – Range, Mean deviation & Standard deviation; Concepts of probability, Probability distributions - Binomial, Poisson & Normal Distribution.

Module-III: Sampling and Testing Hypothesis

Sampling methods, Sampling Errors; Sampling distribution, Hypothesis Testing to compare two populations – Student’s T-test, Interpretation of computer output of ANOVA, Chi – Square Test, F-test.

Module-IV: Forecasting and Statistical Techniques

Correlation-Karl Person, Spearman’s Rank methods, Regression Analysis, least squares method, coefficient of determination, Time Series Analysis, Statistical procedures-descriptive, univariate, bivariate and multivariate statistics.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Text & References:

- P.S.S. SundarRao. *An Introduction to Biostatistics: A manual for students in Health Sciences*, J.Richard Prentice Hall, 1996.
- B.K. Mahajan. *Methods in Biostatistics*, Jaypee Brothers
- Daniel, Wayne.W. *Bio-Statistics: A foundation for Analysis in the Health Sciences*, John Wiley and Sons Pub, 1991.
- K. VishwasRao. *Bio-Statistics: A Manual of statistical methods for use in the Health, Nutrition and Anthropology*, Jaypee Brothers Medical Pub, 1996.
- Verma B.L., Shukla G.D. *Bio-Statistics perspective in Health care research and practice*, C.B.S. Pub, 1993.
- Krishnaiah, P.K. Rao, C.R. (ed), *Handbook of Statistics*, Elsevier Science Pub, 1988.

Syllabus - Third Semester

HOSPITAL MATERIALS MANAGEMENT

Course Code: HAP4305

Credit Units: 03

Course Objective: To make student conversed with Purchase management and Inventory control as the Hospitals carry a large inventory of drugs, sophisticated and highly costly equipment besides beds, furniture and linen.

Course Contents:

Module-I: Introduction to Hospital Material and Store Management

Definition, scope, importance and principles of materials management; Material Cycle; Material Codification - advantages and types, Functioning and types of Stores, lay-out planning and design of hospital stores, duties of officer in-charge & storekeeper, preservation of stores, documentation & evaluation of stores, role of IT in hospital stores management.

Module-II: Purchase Management

Objectives and elements of good purchasing system, Procurement procedure, Tendering system, modes of tenders, Purchase order and its types, types of purchasing systems.

Module-III: Inventory Management

Inventory control, Basic inventory model, Lead time, Buffer stock, Re-order level, Economic order quantity (EOQ), Inventory control costs – Purchase cost, shortage cost, inventory carrying cost & inventory acquisition cost; Inventory ordering systems; Inventory control Techniques- ABC, VED, SDE, SAP, FSN, HML, XYZ, SOS, GOLF, MUSIC.

Module-IV: Stock Verification, Condemnation and disposal

Process and need for stock verification, Techniques of verification, Pilferage, Stock distribution methods, criteria and procedure of stock condemnation and disposal.

Module-V: Equipment Management

Classification of Hospital equipments, Planning and selection of equipments, factors affecting utilization of equipments, equipment failure, equipment maintenance and Equipment audit.

Module-VI: Legal aspects

Role and functions of DGS&D, Registration and blacklisting of firms, Law of contract, Letter of credit & its types, Import & export policy & pricing of goods.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Hospital Stores Management- An Integrated Approach*, by Dr. Gupta Shakti, JaypeeBrothers.
- *Material Management* by Dr. PawanArora, Global India Publication Pvt Ltd
- *Handbook of Materials Management*, P. Gopalkrishnan, EasternEconomy Edition

- *Procurement and Materials management for Hospitals*, Rex H Gregor, Harold C. Mickey

Syllabus - Fourth Semester

OPERATIONS RESEARCH

Course Code: HAP4401

Credit Units: 03

Course Objectives:

- To provide basic OR approach to problem solving.
- To introduce important analytical tools for managerial decision making.
- To introduce concepts of resource allocation & health service planning.

Course Contents:

Module-I: Introduction

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

Module-II: Introduction to OR Techniques

Linear Programming, Decision Tree Analysis, Queuing theory, PERT/CPM

Module-III: OR Models

Replacement models, Sensitivity analysis, Assignment models, Inventory control models, Forecasting.

Module-IV: Applications of OR in Hospitals and Health Agencies

Resource allocation, Health services planning, Deployment of health human power, Materials Management, Equipment replacement, Patient scheduling.

Examination Scheme:

Components	CPA	TP	Q/S	A	ME	EE
Weightage (%)	5	5	5	5	10	70

Text & References:

- *Operations Research in Hospitals: Diagnosis and Prognosis*, David H. Stimson, Ruth H. Stimson
- *Operations Research and Healthcare: A handbook of methods and Applications*, Margaret L. Brandeau, Francois Sainfort, William P. Pierskalla
- *Patients hospitals and Operational Research*, Taylor Francis
- *Operations Research* by P. Rama Murthy
- *Operations Research: Methods, Models and Applications*, Jay E, Aronson and Stanley Zionts

QUALITY MANAGEMENT

Course Code: HAP4402

Credit Units: 03

Course Objective: To understand the concept of quality and its application in healthcare & hospitals.

Course Contents:

Module-I: Basics of Quality Management

Definitions, principles of quality, benefits of quality management, dimensions of quality in primary healthcare and various quality frameworks

Module-II: Quality Improvement Approaches

- Quality Assurance cycle and developing standards.
- TQM Quality Gurus: Deming, Juran and Crosby principles.
- Benchmarking: Principles, types and process of benchmarking
- Medical Audit: Clinical Audit, its methodology and related statistics.

Module-III: Quality Improvement Tools and techniques:

- Tools: Brainstorming, Cause effect Analysis, Flow chart, Pareto Analysis, etc
- Lean Management: Lean principles and its tools - 5 S technique, 3 M technique, Kaizen's theory, Jidoka & Andon, Throughput & Takt Time.
- Six Sigma Methodology and its applications:

Module-IV: Accreditation

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

Module-V: Cost and Quality

Prevention cost, Appraisal Cost, Internal & External failure costs, Net & Total cost of quality.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Text & References:

- *Quality Management in Hospitals* by S. K. Joshi
- *Total Quality Management* – Aswathappa – Himalaya Books House
- *Quality Management* – P. C. Tripathy
- *Hospital Quality Assurance: Risk Management & Program evaluation*, Jesus J. Pena
- Donald E. Lighter and Douglas C Fair: *Quality Management in Health Care – Principles and Methods*, Jones and Bartlett publishers, second edition.
- Daigh RD. *Financial implications of a quality improvement process*.

MANAGEMENT OF CLINICAL SERVICES

Course Code: HAP4403

Credit Units: 03

Course Objectives:

- 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 clinical services in a hospital.
- To understand the processes and details related to effective patient care and to further increase the satisfaction level of patients

Course Contents:

Module-I: Hospital as a system

Concept of patient care, Role of Hospital Administration towards the patient and towards the Hospital, Patient safety and patient risk management.

Module-II: Out-Patient & Inpatient Department

- Organization & management of OPD: Overview of the department, its functions, location and physical facilities, Daycare services; Auxiliary, Ancillary & Domiciliary facilities in the OPD.
- Organization & management of IPD: Overview of department, its functions, Ward design (general & specialized), Nursing Administration, Isolation unit, Janitor's closet.
- Assessment of IPD in terms of Patient Days, Bed Utilization Rate, Ward Occupancy, and Average length of stay.

Module-III: Accident and Emergency Services

Organization & management of department, Physical facilities and Manpower planning, Triaging, Centralized Accident & Trauma services (CATS) and Observation unit.

Module-IV: Operation Theatres& Intensive Care Units

- Organization & Management of OT complex, Pre-op & Post-op area, Zoning, ventilation & lighting, Modular systems, Methods of fumigation and OT scheduling.
- Organization & Management of ICUs, Types of ICUs, Staffing in ICUs, Specialized ICUs – ICCU, NICU, PICU etc, and Critical care scoring

Module-V: Specialty Services

Rehabilitation unit, Nuclear Medicine department, Burns Unit, Obstetrics & gynecology unit, Pediatric unit, Transplantation Unit etc.

Module-VI: Other Hospital Functional Activities

Biomedical Waste Management: segregation, collection, transportation & disposal, Nosocomial Infections & its control, Patient safety

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Principles of Hospital Administration and Planning*, Shakharkar B.M.
- *Modern trends in Planning and designing of Hospitals: Principles and Practice*: Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar.
- *Management of Hospitals & Health services*: Strategic issues and performance, Rockwell Schulz, Alton C. Johnson
- Shakharkar B.M., *Principles of Hospital Administration and Planning*
- *Hospital managerial services* Volume -4, S.L. Goel, R. Kumar
- *Hospital Core Services: Hospital administration in 21st century* Vol 1 Kumar R, S.L. Goel
- *Hospital Management*, Dr. A.K. Malhotra, Global India Publications Pvt ltd, New Delhi
- *Hospital Management : A guide to departments*, Howard S. Roland, Beatrice L Rowland

MANAGEMENT OF SUPPORT & UTILITY SERVICES

Course Code: HAP4404

Credit Units: 03

Course Objectives:

- 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 non-clinical services in a hospital.
- To understand the processes and details related to effective patient care and to further increase the satisfaction level of patients

Course Contents:

Module-I: Support Services-I

- Radiology & Imaging Services: Organization & management of department, Turn-around time assessment, Radiation Hazards and its preventive measures.
- Hospital Laboratory: Its functional components, Lab hazards, quality assessment, NABL
- Blood Bank & Transfusion Services: Blood donation, labelling, transfusion reactions, legal aspects and accreditation.
- Transportation & Ambulance Services: History, Administrative aspects, Basic Life Support (BLS) and Advanced Life support (ALS).

Module-II: Support Services-II

- Central Sterile Supply department: Functional areas, Sterilization process, Theatre Sterile Supply Unit (TSSU) and supply distribution system.
- Dietetics: Functions of Dietary services, Functional areas, equipments, diet distribution systems, centralized & decentralized services and managerial issues.
- Medical Records Department: Types of medical records & their importance, functional organization of MRD, storage & retrieval of records, MRD reports, medico-legal aspects

Module-III: Utility Services-I

- Hospital Linen and Laundry: Types of hospital linen, Basic tasks of laundry, Types of laundering system and laundry process.
- Housekeeping services: Its functions, types, cleaning agents and cleaning operations.
- Mortuary: Physical facilities & staffing, policies & guidelines and managerial concerns.
- Security: Its functions, Security risks and types of security system.
- Pharmacy: Role & types of pharmacies, drug distribution systems, procurement of drugs and managerial issues.

Module-IV: Utility Services-II

- Basic Engineering Services: Civil Assets, Electricity Supply, Water supply, Gas manifold
- Allied Engg services: Air conditioning, Refrigeration, non-conventional energy devices.
- Maintenance & store management, Engg service department
- Engineering Hazards: Hospital Planning & design, Physical environment, Building elements and material, preventive management program.

Examination Scheme:

Components	CP	V	A	ME	EE
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Weightage (%)	5	5	5	15	70
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Texts & References:

- *Principles of Hospital Administration and Planning*, Shakharkar B.M.
- *Modern trends in Planning and designing of Hospitals: Principles and Practice*: Shakti Kumar Gupta, Sunil Kant, RChandrashekar.
- *Management of Hospitals & Health services*: Strategic issues and performance, Rockwell Schulz, Alton C. Johnson
- Shakharkar B.M., *Principles of Hospital Administration and Planning*
- *Hospital managerial services* Volume -4, S.L. Goel, R. Kumar
- *Hospital Core Services: Hospital administration in 21st century* Vol 1 Kumar R, S.L. Goel
- *Hospital Management*, Dr. A.K. Malhotra, Global India Publications Pvt ltd, New Delhi
- *Hospital Management : A guide to departments*, Howard S. Roland, Beatrice L Rowland

DISASTER MANAGEMENT

Course Code: HAP4405

Credit Units: 03

Course Objectives:

- To learn, identify and assess disasters in the community.
- To set-forth policies and procedures for disaster preparedness and to prepare hospital disaster plan.

Course Contents

Module-I: Basics of Disaster Management

Definitions, Determining risk of disaster, Classification of disaster on the basis of origin, source, onset & anticipated response; Disaster process, Effects of Disasters – Health issues, characteristics and geography of disasters, Impact of Disasters on the Hospitals.

Module-II: Disaster Management Process

Phases of disaster management, leadership, organization of medical relief, Triaging, Disaster Response – local, national & International; Disaster Management Act – 2005.

Module-III: Disaster preparedness

Hospital Disaster Plan – its pre-requisites, principles and components; Hospital disaster management committee and its role; Hospital disaster manual.

Module-IV: Fire Safety

Grades of fire and its causes; elements of fire safety, various fire extinguishers; and fire safety training.

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References:

- *A guide to emergency health management after natural disasters*, American health organization scientific publication.
- *Emergency vector control after Natural disaster*, American health organization scientific publication.
- *District Health facilities*, WHO regional publication western pacific services.
- *Medical supply management after natural disaster*, American health organization scientific publication.

Syllabus - Fifth Semester

SUMMER PROJECT EVALUATION

Course Code: HAP4535

Credits Units: 06

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: 2 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

Guidelines for presentation-

- PowerPoint presentation
- Time for presentation: 20minutes
- Time for discussion: 10 minutes

Examination Scheme

Components	Presentation	Report submitted	Viva-voce
Weightage (%)	25	50	25

HOSPITAL MANAGEMENT INFORMATION SYSTEM

Course Code: HAP4502

Credit Units: 03

Course Objective: This course will expose students to developments in computer technology and will help to understand the various indicators of health and health information system and health management information system in hospitals.

Course Contents

Module-I: Information System

Concept of information as a resource, understanding the principles of information systems and Classification of information in hospitals.

Module-II: Management Information System

Concept of MIS, functions of MIS, developing MIS, types of MIS, developing indicators, identifying data and developing tools of measurement and applications of MIS; Use of MIS: monitoring progress and evaluation, hospital planning, monitoring employees, monitoring health development, decision making. Computerization of MIS: demonstration and critical analysis of different MIS software packages used in health projects in hospitals.

Module-III: Managing Hospital Information Systems

- Data generated for HIS; Functions, Benefits and applications of HIS, HIS components, various performance Indicators, HIS model and data movement.
- HIS modules: Various HIS Modules for Clinicians, Nurses and Administrators
- Importance of security and confidentiality of data.

Module-IV: Telemedicine

Concept of Telemedicine and its evolution, Telemedicine network in India, and SWOT analysis of Telemedicine

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References

- *Management Information System (MIS) in Hospitals: A computer based approach for quality in hospital services and administration*, by Anil Kumar Saini
- S.C. Joshi & S.N. Mehta. *National Information System: Planning and Management*, Global vision publishing house.
- *Information Technology in health care: Socio technical approaches*, 2010. IOS Press BV
- Norton P (2010), *Introduction to Computers*, Tata McGraw-Hill
- Potter T (2010), *Introduction to Computers*, John Wiley & Sons (Asia) Pvt Ltd
- Jawadekar, WS (2009); *Management Information System*; Tata McGraw Hill
- Mclead R & Schell G (2009), *Management Information Systems*; Pearson Prentice Hall
- O'Brein, JA (2009); *Introduction to Information Systems*; Tata McGraw Hill

HEALTH INSURANCE AND MEDICAL TOURISM

Course Code: HAP4503

Credit Units: 03

Course Objective:

To acquaint students to the concept of HI and various HI products, so that the students are ready for challenges of healthcare insurance which is emerging as a sector holding great promise.

Course Contents

Module-I: Introduction

History of Health Insurance, Principles of Health Insurance, Public Financing, Private Financing, Current trends in Health Insurance - International and Indian scenario, Economic and financial management of Health Insurance.

Module-II: Private Health Insurance system

Individual Health Plans, Mediciam, Floaters plans, Third Party Administration, Benefits Management, Claims Management, Insurance Regulatory Development Agency (IRDA)

Module-III: Social and Community based Insurance

- Employee State Insurance Scheme (ESIS), Central Government Health Scheme (CGHS), Rashtriya Swasthya BimaYojana (RSBY)
- Micro-insurance

Module-IV: Medical Tourism

Basic Concepts of Medical Tourism, Scope of Medical Tourism in India.

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References:

- Usha Mehta, A.D. Narde. *Health Insurance in India and Abroad*, Allied Publishers.
- Thomas K. T., Sakthivel R. *Health Insurance In India: Overcoming Challenges and Looking Ahead*, Lambert Academic Publishing, 2012.
- Michelle A. Green, JoAnne C. Rowell. *Understanding Health Insurance- A guide to billing and reimbursement*.
- William S Stevens. *Health Insurance- Current Issues and Background*, Nova Science Publishers.

Syllabus - Sixth Semester

DISSERTATION-PROJECT

Course Code: HAP4637

Credit Units: 15

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.

Duration: 6 months

Pedagogy

- Identifying several situations amenable to dissertation work, writing a proposal and making a presentation.
- 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.

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 and decide on the topic of dissertation. The final 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

Examination Scheme:

Components	Presentation	Report submitted	Viva-voce
Weightage (%)	25	50	25