

Course Title: Hospital Architecture, Planning and Designing

Course Code: MBA(HC&HM) 6001

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To develop essential knowledge and skills required for effective planning, designing, and managing healthcare facilities with a focus on the multifaceted aspects of hospital architecture and planning, emphasizing the importance of functionality, operational efficiency, and aesthetic considerations in healthcare facility design.

Outcomes:

Students will be able to -

1. Apply knowledge and skills necessary to effectively plan the development and expansion of healthcare facilities.
2. Recommend knowhow for designing healthcare facilities that meet functional, operational, and aesthetic requirements.
3. Examine the principles of facility layout, workflow optimization, and equipment selection, procurement, maintenance, and utilization.
4. Interpret and comply with laws related to healthcare licensing, accreditation, patient rights, safety standards, and environmental regulations.
5. Plan, implement, and coordinate disaster management services within hospital settings and to execute principles of disaster preparedness, response, and recovery, including risk assessment, emergency planning, resource allocation, communication strategies, and collaboration with external agencies.

Unit 1: Hospital Planning [9 Lecture Hours + 3 Tutorial Hours]

1.1 Concept of Hospital Planning, 1.2 Principles in Planning Hospital Facilities and Services, 1.3 Stages of Hospital Project, 1.4 Financial Estimation, 1.5 Master Plan and Architect Brief, 1.6 Working Drawings and Specifications, 1.7 Concept of Engineering Drawing, 1.8 Equipment Planning, 1.9 Beds Distribution, 1.10 Space Allocation for different Services, 1.11 Interior Designing, Construction and Building Commissioning, 1.12 Market survey, 1.13 Feasibility study, 1.14 Financial Planning of Hospitals, 1.15 Principles of site planning for Hospitals. 1.16 Building Orientation 1.17 Shake down period, 1.18 Understanding Break Even Point.

Unit 2: Hospital Infrastructure Designing [9 Lecture Hours + 3 Tutorial Hours]

2.1 Definition of Hospital, 2.2 Primary, Secondary, Tertiary, Single Speciality Hospitals, Medical Colleges in India, 2.3 Brown Field Projects, Green Field Projects. 2.4 Master-Planning of Hospitals with respect to Urban Design and Landscaping, 2.5 Concept of Green Hospitals. 2.6 Nursing Calling System 2.7 Pneumatic Tube Systems (PTS) in Hospitals.

Unit 3: Planning of Hospital Facilities and Equipment. [9 Lecture Hours + 3 Tutorial Hours]

3.1 Planning and Designing of Outpatient department, 3.2 Accident & Emergency Service, 3.3.1 Daycare Services, 3.3.2 Inpatient wards, 3.3.3 Intensive Care Units, 3.3.4 Surgical Suits, and 3.4 .1 Planning for Labour and Delivery Suites. 3.4.2 Planning and designing of Laboratory services, Blood Bank Service, Radiology Service: Echo, X-Ray, ECG, TMT, USG, CT, MRI, PET-CT, Nuclear Medicine, CSSD, Linen and

Laundry, Medical Gases, HVAC, Mortuary.

3.5 Advanced Facilities: Radiotherapy unit, Cardiac Catheterization Laboratory(Cath Lab), Endoscopy Units, IVF unit, Dialysis Unit, Bone Marrow Transplant Unit, Air Ambulance Services.

3.6 Infection Control Practice and Hospital Zoning

Unit 4: Statutory Acts and Licenses Applicable to Hospitals [9 Lecture Hours + 3 Tutorial Hours]

4.1 Certificate of Incorporation, 4.2 Permanent Account Number (PAN), 4.3 Goods and Services Tax(GST), 4.4 Shops & Establishments Act, 4.5 Luxury Tax, 4.6 Trade Mark Registration, 4.7 Building Permit / Occupancy Certificate, 4.8 Fire NOC, 4.9 Explosive License (Compressed Gas), 4.10 Spirit License, 4.11 Pollution Control Board (PCB) Approvals, 4.12 Bio-Medical Waste Management Services Certificates, 4.13 Annual Report & MOU, 4.14 Regulatory License for Lift, 4.15 License for Storage of Petrol/Diesel. 4.16 AERB Approvals for Medical Radiation Equipment's and its Layout (including, X-Ray, Cath-Lab, CT Scan, C-Arm,

Unit5: Disaster Management Services [9 Lecture Hours + 3 Tutorial Hours]

5.1 introduction to Disaster Management and Mass casualties, 5.2 Components of disaster plan 5.3 Disaster alertness in Hospital 5.4 Risk Assessment and Severity of illness amongst disaster victims 5.5 Triage.

Suggested Readings:

Text Books

"Hospital and Healthcare Facility Design" by Richard L. Miller

"Hospital Planning and Administration" by S. B. Naik

"Planning and Designing Healthcare Facilities: A Lean, Innovative, and Evidence-Based Approach" by Jeffrey A. Harper

Tutorials:

"Architectural Design of Hospitals and Health Centres" (YouTube Playlist)

"Hospital Planning and Designing Tutorial" (LinkedIn Learning)

MOOCs: (indicative)

1. Coursera - "Healthcare Facility Planning and Design"
2. edX - "Disaster Management"

Course Title: Hospital Accounting

Course Code: MBA(HC&HM) 6002

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To provide students with a comprehensive understanding of hospital accounting and finance principles and practices, enabling them to effectively manage financial operations within healthcare organizations.

Outcomes:

Students will be able to –

1. **Demonstrate comprehension of accounting principles:** Students will be able to explain the basic principles of accounting, including accrual accounting, revenue recognition, and matching principles, and apply them to hospital financial transactions.
2. **Analyze hospital financial statements:** Students will be able to interpret and analyze “hospital financial statements, including balance sheets, income statements, and cash flow statements, to assess the financial health and performance” of healthcare organizations.
3. **Implement cash accounting and cash management strategies:** Students will be able to “apply cash accounting techniques and implement effective cash management” strategies to optimize liquidity and mitigate financial risks within hospital settings.
4. **Apply hospital accounting practices:** Students will be able to apply specialized accounting practices relevant to healthcare organizations, such as budgeting, cost allocation, and reimbursement methodologies, to address financial challenges and support decision-making processes.
5. **Utilize hospital cost accounting techniques:** Students will be able to utilize “cost accounting techniques, such as activity-based costing and cost-volume-profit analysis”, to analyze and manage costs within hospital operations, ultimately improving efficiency and financial performance.

UNIT 1 Introduction to Accounting [9 Lecture Hours + 3 Tutorial Hours]

1.1 Meaning, 1.2 Concepts, 1.3 Principles, 1.4 Accounting Rules 1.5 Single and Double Entry System 1.6. Journal Entry, 1.7 Bookkeeping, 1.8 Ledger 1.9 Accounts Receivable and Accounts Payable 1.10 Generally Accepted Accounting Principles

UNIT 2 Fundamentals of Accounting [9 Lecture Hours + 3 Tutorial Hours]

2.1 Payroll and Executive Remuneration 2.2 Trial Balance 2.3 Rectification of Errors 2.4 Asset Accounting 2.5 Accounting for Depreciation 2.6 Reserves and Provisions 2.7 Indian Corporate Sector, 2.8 Management Accounting 2.9 Concept of EBITA 2.10 Application of GST in Hospital: Room Rent, Medicines Consumables and Services.

UNIT 3 Cash Accounting and Cash Management [9 Lecture Hours + 3 Tutorial Hours]

3.1 Billing / Cash Receipts and Daily Cash Summary 3.2 Bank Accounts and Bank Reconciliation, 3.3 Cash Book, 3.4 Petty Cash Management, 3.5 Authorization and Approval, 3.6 Statement of Cash Flow, 3.7 Cash Budgeting, 3.8 Cash Control.

UNIT 4: Hospital Accounting and Financial Statements [9Lecture Hours + 3 Tutorial Hours]

4.1 Departmentalized Accounting, 4.2 Internal Control and Internal Auditing, 4.3 Trust Funds, 4.4 Investment Accounting, 4.5 Application of Software, 4.6 Revenue and Capital Expenditure, 4.7 Receipt and Payment Account, 4.8 Income and Expenditure Statement, 4.9 Balance Sheet, 4.10 Statutory Audit.

UNIT 5: Hospital Cost Accounting [9 Lecture Hours + 3 Tutorial Hours]

5.1 Basics of Cost Accounting: Types and Elements
5.2 Cost Behavior 5.3 Cost Centers 5.4 Cost Volume Profit Analysis/Breakeven Analysis 5.5 Cost Sheet preparation and Interpretation 5.6 Concept of cost Containment
5.7 Rate Setting and Pricing Decision in Hospital

Suggested Reading:

Text Books

1. Steven F. Kukla, Cost Accounting and Financial Analysis for the Hospital Administrator (American Hospital Publishing Inc., AHA)
2. M.C. Shukla and T.S. Grewal, Advanced Accounts (S.Chand & Company Ltd., New Delhi) ISBN 81-219-0396-3
3. S.C. Kuchhal, Corporation Finance: Principles and Problems (Chaitanya Publishing House, Allahabad)

References:

1. VHAI, An Accounting Guide for Voluntary Hospitals in India (The Voluntary Health Association of India, New Delhi)

Additional Resources:

1. "Healthcare Finance: An Introduction to Accounting and Financial Management" by Louis C. Gapenski
2. "Financial Management for Nurse Managers and Executives" by Cheryl Jones
3. "Cost Accounting in Healthcare: A Comprehensive Guide" by Steven A. Finkler, David M. Ward, and Thad Calabrese

Tutorials:

1. "Healthcare Finance and Budgeting" (LinkedIn Learning)
2. "Accounting Basics for Healthcare Professionals" (YouTube Playlist)

MOOCs: (indicative)

1. Coursera - "Financial Management in Health Services"
2. edX - "Healthcare Finance and Financial Management"
3. <https://www.coursera.org/learn/introduction-to-healthcare-finance>
4. <https://www.coursera.org/learn/introduction-to-healthcare-accounting#modules>

Course Title: Logistics and Supply Chain Management in Healthcare

Course Code: MBA(HC&HM) 6003

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To comprehensively gain an understanding of “logistics and supply chain management in healthcare” and proficiently apply those principles and techniques to enhance operational efficiency.

Outcomes:

Students will be able to -

1. To apply fundamental principles of materials management within the healthcare sector.
2. Implement purchasing principles and practices to achieve cost-effective procurement in the healthcare organization.
3. Develop skills in planning, inspecting, verifying, storing, and distributing to optimally manage healthcare resources.
4. To formulate scientific inventory management strategies in healthcare settings to minimize waste and enhance resource utilization.
5. To design and implement the application of Management Information Systems (MIS) in hospital logistics and supply chain management, considering the unique requirements of various clinical and supportive departments.

Unit 1: Materials Management [9 Lecture Hours + 3 Tutorial Hours]

1.1 Definition, Objectives and Functions 1.2 Materials Cycle 1.3 Duties of Materials Manager, 1.4 Problems and Issues in Hospital Materials Management, 1.5 Information Systems for Hospital Materials Management

Unit 2: Purchasing [9 Lecture Hours + 3 Tutorial Hours]

2.1 Elements and Objectives of Purchasing, 2.2 Purchase System, 2.3 Purchase Cycle, 2.4 hospital Purchase Procedures, 2.5 Legal and Ethical Aspect of Purchase: Conditions of Contract, Applicable Financial Regulations, Arbitration in Purchase Management

Unit 3: Equipment Purchase and Maintenance [9 Lecture Hours + 3 Tutorial Hours]

3.1 Planning and Selection of Equipment 3.2 Import of Equipment 3.3 Equipment Utilization 3.4 Equipment Maintenance and Repair 3.5 Equipment Audit.

Unit 4: Inspection, Storage and Distribution of Materials [9 Lecture Hours + 3 Tutorial Hours]

4.1 Inspection and Verification of Materials 4.2 Storage, 4.3 Distribution of Materials, 4.4 Condemnation and Disposal of items.

Unit 5: Scientific Inventory Management [9 Lecture Hours + 3 Tutorial Hours]

5.1 Codification and Standardization of items 5.2 The Value Analysis, 5.3 Concept of Lead Time 5.4 Safety/Buffer Stock 5.5 Reorder Level, 5.6 Economic Order Quantity (EOQ), 5.7 FIFO, 5.8 LIFO, 5.9 ABC Analysis, 5.10 VED Analysis, 5.11 Case Studies on Inventory Control (Pharmacy, CSSD, Laundry)

Suggested Reading:

Text Books

1. Shakti K Gupta and Sunil Kant, Hospital Stores Management: An Integrated Approach (Jaypee Publications, New Delhi, India)
2. Essentials of Supply Chain Management" by Michael H. Hugos
3. WHO, Maintenance and Repair of Laboratory, Diagnostic, Imaging and Hospital Equipment (WHO, Geneva)

Further Readings:

1. "Logistics and Supply Chain Management in Healthcare: A Comprehensive Guide" by Donald Waters
2. "Healthcare Supply Chain Management: Basic Concepts and Principles" by Eduard Van Der Geest

Tutorials:

1. Supply Chain Management Fundamentals (LinkedIn Learning)
2. Logistics and Supply Chain Management in Healthcare (Coursera)

MOOCs: (indicative)

1. Coursera - "Supply Chain Management"
2. edX - "Healthcare Supply Chain Management"

Journals:

1. Supply Chain Management Review
2. Journal of Business Logistics

Course Title: Hospital Service Marketing

Course Code: MBA(HC&HM) 6004

Course Credits: 3 Lectures + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: To utilize principles of service marketing and to develop effective strategies for healthcare service delivery, management, and problem-solving related to service quality in healthcare organizations.

Course Outcome: Upon completing of this course, the student will be able to

1. Explain the concept and importance of marketing in healthcare organizations.
2. Develop skills for planning and managing service demand and capacity in healthcare organizations.
3. Relate the role of people in delivering service quality in healthcare organizations.
4. Examine various strategies in Hospital Service Marketing
5. Make use of knowledge, skills, and abilities for continuous quality improvement in Hospital service marketing

Unit 1: Introduction to Service Marketing [9 Lecture Hours + 3 Tutorial Hours]

1.1 Definition and Characteristics of services, 1.2 Tangibility of Hospital Services 1.2 Marketing mix for Hospital Services. 1.3 Service quality, Integrated Gap model 1.4 Measuring and improving service quality

Unit 2: Service Strategy Planning, Product Creation [9 Lecture Hours + 3 Tutorial Hours]

2.1 Understanding the customer and competition. 2.2 Positioning services, 2.3 Service triangle concept. 2.3 Creating service products, 2.4 Customer value hierarchy. 2.5 Branding service products. 2.6 Branding of Hospital Facility.

Unit 3: Pricing, Demand Management, Place & Channels [9 Lecture Hours + 3 Tutorial Hours]

3.1 Pricing Objectives in Healthcare Organizations 3.2 Methods of pricing 3.3 Customer as co-producer, 3.3 Strategies for matching capacity and demand 3.4 Channels of Healthcare Distribution: Major Distribution Decisions, Strengthening Referral System, Need for marketing specialists in healthcare distribution, Types of marketing channels, Selection of channels, Digital Marketing.

Unit 4: Promotion, Service Environment, People Management [9 Lecture Hours + 3 Tutorial Hours]

4.1 Promotion Decision: Sales Force in Healthcare Organizations, Advertising in Healthcare Industry, Sales Promotion Practices in Healthcare Organizations, Public relations and News Media Relations in Hospitals and Health Care Organizations

4.2 Physical evidence, Services capes - types and role, customer response to environment.

4.3 Strategies for delivering service quality through people, Service leadership and culture

Unit 5: Medical Tourism [9 Lecture Hours + 3 Tutorial Hours]

5.1 Introduction to Medical Tourism 5.2 Wellness Tourism 5.3 Concept of Medical

Value Travel (MVT) 5.4 National Strategy for Medical Value Travel and Wellness Tourism 5.5 “Heal in India” brand for promoting India as Wellness Tourism Destination 5.6 Medical Value Travel Facilitators 5.7 Telemedicine as a Focus Area 5.8 Digitalization by MVT Portal 5.9 Visa Policy 5.10 National Medical & Wellness Tourism Promotion Board (NMWTB) 5.11 Medical Forms for Air travelling

Suggested Reading:

Text Books

1. Zeithaml, V.A., Bitner, M J, Gremler, D.D. & Pandit, A.: Service Marketing;, TMH
2. Rao, K.R.M.: Services Marketing, Pearson Education
3. Rajendra Nargundkar, Services Marketing: Text & Cases, Tata McGraw-Hill Publishing Company, New Delhi, 2008
4. Apte, G.: Service Marketing; OUP
5. Lovelock, C., Wirtz, J. & Chatterjee, J.: Services Marketing; Pearson Education
6. Srinivasan R.: Services Marketing; PHI

Minor/ Specialization – Track 1 Healthcare Management

Course Title: Health Informatics and Artificial Intelligence

Course Code: MBA(HC&HM) 6005

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To provide an in-depth understanding of health informatics and concept of artificial intelligence in the context of healthcare and hospital management. Besides, exploring the application of technology to improve healthcare processes, decision-making, and patient outcomes.

Outcomes:

Students will be able to -

1. Demonstrate a comprehensive understanding of the fundamental concepts of health informatics and information systems and concept of artificial intelligence, including their applications in healthcare settings.
2. Examine electronic health records (EHRs) and perform accurate medical transcription tasks.
3. Outline various nomenclatures and classification systems used in healthcare, such as ICD (International Classification of Diseases) and SNOMED CT (Systematized Nomenclature of Medicine Clinical Terms) etc. And to apply these systems effectively to categorize and code medical data for purposes including billing, research, and patient care.
4. Design and develop the principles and practices of telemedicine, including the use of Information and Communications Technology (ICT) to provide remote healthcare services, evaluate telemedicine technologies, implement telehealth solutions in clinical settings, and assess the ethical and legal implications associated with telemedicine practice.
5. Make use of the electronic health record (EHR) standards specific to the Indian healthcare system, including, existing EHR standards, identify areas for improvement, and propose solutions aligned with the unique requirements and regulations of the Indian healthcare landscape and additionally, to the adoption and implementation of standardized EHR systems across healthcare institutions in India.

Unit 1: Introduction to Health Informatics and Artificial Intelligence Applications [9 Lecture Hours + 3 Tutorial Hours]

1.1 Health Informatics: 1.1.1 Hospital Information System, 1.1.2 Clinical Decision Support System, 1.1.3 eHealth, 1.1.4 mHealth.

1.2. AI in Healthcare: 1.2.1 Digital Journey, 1.2.2 Sources of Data, 1.2.3 Need for Artificial Intelligence, 1.2.4 DICOM 1.2.5 HL7-IHE, 1.2.6. Fast Healthcare Interoperability Resources (FHIR) 1.2.6 Biomedical Signal Processing

Unit 2: Electronic Health Records & Medical Transcription [9 Lecture Hours + 3 Tutorial Hours]

2.1 EHR definitions contents and examples of EHR practices, 2.2 Preliminary steps in implementation of EHR, 2.3 Issues and challenges in implementation of EHR, 2.4 Factors to be considered when developing EHR & Implementation Plan.

2.5 Medical Transcription: Objectives of Medical Transcription, Rules of Medical Transcription, Advantages of Medical Transcription.

Unit 3: Introduction to Nomenclatures and Classification Systems [9 Lecture Hours + 3 Tutorial Hours]

3.1 Standard Nomenclatures of diseases (SNDO), 3.2 Current Medical Information Terminology, 3.3 Systematized Nomenclature of Pathology (SNOP), 3.4 Systematized Nomenclature of Medicine (SNOMED), 3.5 Common Procedures Coding System (HCPCS), 3.6 Current Procedural Terminology, 3.7 International Classification of Functioning, 3.8 Disability and Health (ICF), 3.9 Case-Mix Classifications, 3.10 Diagnosis Related Groups, 3.11 ICD 9 (CM), ICD 10, ICD- Oncology (ICD - O), ICD 11.

Unit 4: Telemedicine [9 Lecture Hours + 3 Tutorial Hours]

4.1 Basic health care, 4.2 Classification of Telemedicine, 4.3 Telemedicine: Technology of Telemedicine, Objectives of Telemedicine, Rules of Telemedicine, Telemedicine Act, Merits of Telemedicine, Future Telemedicine plans.

Unit 5: Electronic Health Record (EHR) Standards For India [9 Lecture Hours + 3 Tutorial Hours]

5.1 Goals, Standards and Interoperability.

5.2 Health Record IT Standards: 5.2.1 Identification and demographic information of patient, 5.2.2 Architecture requirements and Functional specifications, 5.2.3 Logical information reference model and Structural composition, 5.2.4 Medical terminology and Coding standards. 5.2.5 Data standards for Image: Multimedia, waveform, document.

5.2.6 Data exchange standards, 5.2.7 Discharge/Treatment summary Format, e-prescription, personal healthcare and medical devices interfacing, Principles of Data change

5.3 Data Ownership of Health Records: 5.3.1 The ethical, legal, social issues (ELSI) guidelines, 5.3.2 Protected Health Information, 5.3.3 Data ownership, 5.3.4 Data access and Confidentiality, 5.3.5 Disclosure of Protected / Sensitive Information, 5.3.6 Responsibilities of a Healthcare provider, 5.3.7 Privileges of Patient or Personal Representative, 5.3.8 Electronic Medical Records Preservation, 5.3.9 Patient Identifying Information

5.4 Data Privacy and Security:

5.4.1 Security of Electronic Health Information, 5.4.2 Purpose of the Security Standards, 5.4.2 Administrative Safeguards Standards, 5.4.3 Physical Safeguards Standards

5.5 Security Technical standards: 5.5.1 Authentication, 5.5.2 Automatic log-off, 5.5.3 Access control, 5.5.4 Access Privileges, 5.5.5 Audit log, Integrity, Encryption, 5.5.6 Digital Certificates.

Suggested Reading:

Text Books

1. Health Information Management Sixth Edition: Concepts, Principles by Pamela Oachs, Amy Watters
2. ICD 10-CM, 10th revision, by world health organization
3. International Classification of Procedures in medicine by world health organization
4. Management Information System (MIS) in Hospitals: A Computer-based Approach for Quality in Hospital Services and Administration by Anil Kumar Saini
5. The Electronic Health Record For The Physician's Office For Simchart For The Medical Office With Access Code 3Rd Edition 2020 by Pepper J, Elsevier
6. Medical Informatics 20/20: Quality And Electronic Health Records Through Collaboration Open Solutions And Innovation by Douglas Goldstein , Jones and Bartlett Publishers
7. <https://www.nrce.in/>
8. Electronic Health Record (EHR) Standards for India:
<https://main.mohfw.gov.in/sites/default/files/17739294021483341357.pdf>

Tutorials:

1. Health Informatics and Artificial Intelligence (Coursera)
2. Introduction to Telemedicine (LinkedIn Learning).

MOOCs: (indicative)

1. Coursera - "Healthcare Information Technology (HIT)"
2. edX - "Artificial Intelligence in Healthcare"

Minor/Specialization – Track 1 Healthcare Management

Course Title: Health Insurance and Managed Care

Course Code: MBA(HC&HM) 6006

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To provide students with an understanding of the principles and implementation of health insurance and managed care within the context of the Indian healthcare system. This includes exploring various types of “insurance policies, coverage options, handling health insurance claims and disputes, navigating managed care systems, negotiating and establishing contracts with consultants and hospitals”, managing the utilization of healthcare facilities and consultants, and examining pertinent aspects of managed care.

Outcomes:

Students will be able to -

1. Explain the fundamental concepts and key principles underlying health insurance practices.
2. Develop skills for assessing and managing risks associated with health insurance and healthcare delivery
3. Apply costing techniques to design effective benefit packages, ensuring a balance between coverage and affordability.
4. Analyse and assess the mechanisms involved in provider payments within the health insurance framework.
5. Formulate strategies for designing and implementing community health insurance programs, considering the unique needs of diverse populations.
6. Examine managed care principles, emphasizing their role in optimizing healthcare delivery.
7. Evaluate various systems and components integral to managed care, exploring their impact on healthcare organizations and patient outcomes.

Unit 1: Health Insurance, Market Failure and Risks [9 Lecture Hours + 3 Tutorial Hours]

1.1 Concept and meaning of Health Insurance, 1.2 Concept of Social security, Risk and Insurance, 1.3 Community Health Insurance (CHI), 1.4 Employer Based Insurance, 1.5 Health Micro Insurance (MHI) and Reinsurance, 1.6 Fundamental difference among various Health Insurance Schemes 1.7 Co-payment / Coinsurance, 1.8 Deductibles, 1.9 Indemnity payment, 1.10 Mandatory referral system 1.11 Collective membership and Group policies 1.12 Cost Escalation: Treatment Protocol, fixed fee per illness

Unit 2: Designing Benefit Package and Premium setting [9 Lecture Hours + 3 Tutorial Hours]

2.1 Designing Benefit Package: Financial Resources, Existing infrastructure and quality & Accreditation in care, priority, utilization, pattern of disease and injury, level of health services, estimating maximum demand.

2.2 Costing the Benefit Package: Cost of pharmaceuticals, consultations, diagnostic support services, hospitalization, additional services and operating costs

2.3 Premium Setting: Underwriting Process, Actuarial Analysis, Claim Experience, Risk Pooling, Regulatory Requirements, Market Competition, Benefit Design, and Profit Margin and Administrative Costs

Unit 3: Health Insurance Operations and Third Party Administration [9 Lecture Hours + 3 Tutorial Hours]

3.1 Provider Payment Mechanism: Concept, Fee for Services, Case payment, Daily charge, Bonus payment, Flat rate payment, Capitation.

3.2 Third Party Administration: Definition, function, importance of TPA.

Unit 4: Systems of Managed Care in India [9 Lecture Hours + 3 Tutorial Hours]

4.1 Ayushman Bharat - National Health Protection Mission, Pradhan Mantri Jan Arogya Yojana (PMJAY), Rashtriya Swasthya Bima Yojana (RSBY), 4.2 Employee State Insurance Scheme (ESIS), 4.3 Central Government Health Scheme (CGHS), 4.4 State Health Insurance Schemes (SHIS), 4.5 Universal Health Coverage (UHC) Programs, 4.6 West Bengal Health for All Employees and Pensioners Cashless Medical Treatment Scheme 2014.

Unit 5: Regulatory Framework and IRDA [9 Lecture Hours + 3 Tutorial Hours]

5.1 Overview of the Insurance Regulatory and Development Authority of India (IRDAI)

5.2 Roles, 5.3 functions, and 5.4 control of IRDAI in regulating health insurance

5.5 Compliance with IRDAI guidelines and ethical considerations in health insurance practices, 5.6 Insurance Information Bureau of India (IIB), 5.7 Registry of Hospitals in Network of Insurance (ROHINI).

Suggested Reading:

Text Books

1. Kongstvedt, P. R. (Ed.). (1989). *The Managed Health Care Handbook*. Maryland, USA: Aspen Publication.
2. Srinivasan, S. (2018). *Health Insurance in India - Opportunities, Challenges, and Concerns*. Springer.
3. Harpster, L. M., & Veach, M. S. (1990). *Risk Management Handbook for Healthcare Facilities*. American Hospital Association: USA.

Further Reference Books and Materials:

1. Rickel, A. V., & Wise, T. N. (2000). *Understanding Managed Care*. Karger: USA.
2. Reddy, S. (2016). *Health Insurance in India: A Study of Awareness and Buying Behavior*. LAP Lambert Academic Publishing.
3. Agarwal, A. (2020). *Health Insurance in India: A Market Dynamics Perspective*. Notion Press.
4. National Health Authority, Government of India - *Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) Handbook*.
5. Insurance Institute of India - *Health Insurance Underwriting and Claims Management*.
6. IC-38 INSURANCE AGENTS GENERAL. <https://www.libertyinsurance.in/docx/IC-38.pdf>

7. <https://irdai.gov.in/ebooks>

Journals:

- *Indian Journal of Insurance and Risk Management*
- *Journal of Health Management*
- *The Geneva Papers on Risk and Insurance: Issues and Practice*

Online Resources: (indicative)

- IRDAI Official Website: <https://www.irdai.gov.in/>
- National Health Mission, India - Ayushman Bharat: <https://pmjay.gov.in/>
- ROHINI official website. <https://rohini.iib.gov.in/>
- Swasthya Sathi official website. <https://swasthyasathi.gov.in>

Minor/Specialization – Track 2 Hospital Management

Course Name: Health Safety and Risk Management

Course Code: MBA(HA) 6007

Credits: 3 Lectures + 1 Tutorial

Hours: 45 Lecture Hours + 15 Hours Tutorial

Objective: - The objective of the course "Health Safety and Risk Management is to equip students with comprehensive knowledge and understanding of various aspects related to hospital waste management, environmental issues, and their rational utilization within healthcare settings.

Outcomes:

1. Familiarize students with the principles and practices of hospital waste management to ensure the safe and efficient disposal of biomedical wastes.
2. Develop an understanding of environmental issues affecting healthcare facilities, and explore strategies for mitigating their impact.
3. Equip students with the knowledge and skills necessary to assess risks in healthcare environments and implement effective risk management strategies to safeguard the health and safety of patients, staff, and visitors.
4. Foster critical thinking and problem-solving abilities in analysing and addressing various health safety challenges encountered in healthcare management settings.
5. Encourage students to explore innovative approaches and technologies for improving health safety practices and minimizing risks in healthcare facilities.

Unit 1: Hospital Related Infections (11 Lecture Hours + 4 Tutorial Hours)

1.1 Introduction, 1.2 Mode of Transmission, 1.3 Interruption of transmission, 1.4 Role of Nursing, Housekeeping, CSSD, Dietary, Linen and Laundry, 1.5 Common Nosocomial Infections and their Causative agents, 1.6 Hospital Infection control committees, 1.7 Preventive methods Nosocomial Infections 1.8 Monitoring and control of cross infections.

Unit 2: Hospital Waste Management (11 Lecture Hours + 4 Tutorial Hours)

2.1 Meaning, 2.2 2Categories of Biomedical Wastes, 2.3 Disposal of biomedical wastes: 2.3.1 Incineration and its Significance in Hospitals, 2.3.2 Autoclaving, 2.3.3 microwaving and 2.3.4 deep burial, 2.3.5 Segregation, 2.3.6 Packaging, 2.3.7 Transportation and Storage. 2.4 Sewage wastes: 2.4.1 Meaning, 2.4.2 Composition, 2.4.3 Modern sewage treatment methods, 2.4.4 Solid and Liquid wastes and their treatment. 2.5 Waste disposal: 2.5.1 State and Government Regulations (Bio Medical Waste Management Rules – 2016), 2.5.2 Colour code practices, 2.5.3 Waste segregation, 2.5.4 Agencies appointment for waste disposal, 2.5.5 Environmental safety

Unit 3: Hospital Hazards Management (4 Lecture Hours + 1 Tutorial Hours)

3.1.1 Meaning, 3.1.2 Needs, 3.1.3 Principles, 3.1.4 Purpose, 3.1.5 Impact on employees, 3.1.6 Patients and Visitors; 3.1.7 Preventive measures.

3.2 Types of Hospital Hazards – 3.2.1 Physical, Biological, 3.2.2 Mechanical, and 3.2.3 Psychological Hazards.

Unit 4: Fire and Radiation Hazards (7 Lecture Hours + 3 Tutorial Hours)

4.1 Fire Hazards – 4.1.1 Elements of Fire- 4.1.2 Fire Hazard Triangle- 4.1.3 Causes of Hospital Fires, 4.1.5 Structure Planning and Design Consideration 4.1.6 Central Air Conditioning Facilities 4.1.7 Electric Installation 4.1.8 Hazards Associated with Furnishing Material, Curtains Upholstery, Dresses, Bed and Bedding Materials 4.1.9 Water Supply, Fire Points and Escape Routes

4.2 Radiation Hazards - 4.2.1 Biological Effects of Radiation Hazards 4.2.2 Radiation Protection and Safety 4.2.3 Radioactive Waste Collection and Disposal 4.2.4 Radioactive waste 4.2.5 4.2.3 Magnetic Resonance Imaging: Planning Constrains, Preventive Measures Against Magnetic Field Hazards 4.2.4 Laser Hazards and Safety

Unit 5: Security Organisation and Management (12 Lecture Hours + 3 Tutorial Hours)

5.1 Security Threats and Vulnerabilities of Hospitals 5.2 Security Sensitive Areas 5.4 Functions of Hospitals Security Department 5.5 Physical Security Measures 5.6 Perimeter Protection System 5.7 Implementing Physical Controls 5.8 Access Control 5.9 Need, Integration and types of Security Technology 5.10 Computer and Information Security 5.11 Security Agency and Security Training

Suggested Reading:

Text Books:

1. Hospital Waste Management: A Guide for Self Assessment and Review-Baserkar Shishir
2. Hospital Infection Control Guidelines: Principles and Practice: Singh Sanjeev, Gupta Shakti Kumar, Kant Sunil
3. Healthcare Risk Management Fundamentals" by American Society for Healthcare Risk Management (ASHRM).

Websites:

- World Health Organization (WHO) - Health Security and Environment section.

- Centers for Disease Control and Prevention (CDC) - Healthcare-associated Infections section.

MOOCs:

- "Infection Prevention and Control" by Imperial College London on Coursera.
- "Preventing the Spread of Infection in Healthcare Settings" by OpenWHO.
- "Biomedical Waste Management" by NPTEL (National Programme on Technology Enhanced Learning).
- "Healthcare Hazard Control and Safety Management" by University of Michigan on Coursera.

Journals:

- Journal of Hospital Infection
- American Journal of Infection Control
- Journal of Environmental Management
- Journal of Hospital Safety and Healthcare Risk Management
- Safety Science
- Journal of Security and Sustainability Issues

Others:

- CDC Guidelines for Infection Control in Healthcare Personnel
- WHO Guidelines on Hand Hygiene in Healthcare
- Central Pollution Control Board (CPCB) guidelines on Biomedical Waste Management
- World Health Organization (WHO) Technical Guidelines on Healthcare Waste Management
- Occupational Safety and Health Administration (OSHA) guidelines
- International Association for Healthcare Security and Safety (IAHSS) training materials
- Department of Homeland Security (DHS) guidelines on hospital security

National Fire Protection Association (NFPA) standards

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Minor/Specialization – Track 2 Hospital Management

Course Title : Hospital Operations Management

Course Code : MBA(HC&HM) 6008

Course Credits: 3 Lectures + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: Demonstrate expertise in distinguishing between manufacturing and hospital service operations, assessing factors influencing clinic location, optimizing hospital layout and design for efficient processes and infection control, understanding inspection and quality control methods, and applying work study principles to enhance efficiency.

Course Outcome: Upon completing of this course, the student will be able to

1. Differentiate between manufacturing and hospital service operations, recognizing the responsibilities of operations managers in healthcare settings.
2. Evaluate factors influencing the location of clinics, with a focus on outpatient (OPD), inpatient (IPD), and diagnostic services.
3. Demonstrate knowledge of hospital layout and design principles, considering cost implications and infection control practices.
4. Apply inspection and quality control methods, including statistical quality control, scheduling techniques, and an introduction to project management.
5. Apply work study principles to improve efficiency in hospital operations, including method study, work measurement, and the determination of standard time.

Unit1: Introduction to Hospital Operations Management: [9 Lecture Hours + 3 Tutorial Hours]

1.1 Hospital Service Operations, 1.2 Process Matrix 1.3 Capacity planning 1.4 Responsibilities of Operations Manager; 1.5 Production Cycle, 1.6 Production Planning & Control Concept, 1.7 Characteristics of Clinical Operations

Unit 2: Clinics Location in Hospital [9 Lecture Hours + 3 Tutorial Hours]

2.1 Need for a Good Clinics Location 2.2 Factors influencing OPD, IPD, Diagnostics Service Location 2.3 Tangible and Intangible Factors 2.4 Economic Survey of Site Selection

Unit 3 Hospital Layout & Design [9 Lecture Hours + 3 Tutorial Hours]

3.1 Need and Characteristics for a Hospital Layout 3.2 opportunity Costs associated with hospital Layout; 3.3 Designing Process Layout vs. Product Layout; 3.4 Optimization in a Process Layout and Product Layout 3.5 Infection control practices in hospital layout, 3.6 Hospital Zoning.

Unit 4: Inspection & Quality Control: [9 Lecture Hours + 3 Tutorial Hours]

4.1 Types of Inspection 4.2 Statistical Quality Control 4.3 Sequencing of 2 Jobs 4.4 Turnaround Time, 4.5 Gantt Charts 4.6 Introduction to Network analysis – CPM and PERT, Work Breakdown Structure.

Unit 5: Work Study: [9 Lecture Hours + 3 Tutorial Hours]

5.1 Definition and its Importance; 5.2 Basic Procedure in Performing a Work 5.3 Method Study: Objectives and Procedure; 5.4 Work Measurement: Objectives and Procedure; 5.5 Concepts of Performance Rating, Basic Time, Allowances and Standard Time

Suggested Reading:

Text Books

1. Chary, S.N. – Production and Operations Management; TMH
2. Bedi, K. – Production and Operations Management; Oxford University Press
3. Panneerselvam, R. – Production and Operations Management, PHI
4. Chase, Jacobs, Aquilano and Agarwal – Operations Management for Competitive Advantage; TMH
5. Collier, Evans and Ganguly – Operations Management; Cengage Learning
6. Buffa, E. S. and Sarin, R.K. – Modern Production / Operations Management; John Wiley
7. "Operations Research" by Majumdar and Nandi (Pen and Paper Publication)
8. "Operations Research" by J.K. Sharma (Pearson Education)

Course Title: Strategic Management in Healthcare

Course Code: MBA(HA) 6009

Course Credits: 3 Lecture + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: To instill strategic healthcare management principles, empowering prospective healthcare administrators with the requisite skills for adept leadership within healthcare organizations, thereby facilitating effective navigation of the complex healthcare landscape among the students.

Course Outcome: Upon completing of this course, the student will be able to;

1. Discuss a foundational understanding of the fundamental concepts underpinning strategic healthcare management, elucidating its theoretical framework and practical application within healthcare contexts.
2. Explore the underlying principles governing strategic healthcare management, including strategic planning, resource allocation, and decision-making processes, fostering a nuanced appreciation of strategic management dynamics.
3. Develop proficiency in implementing the structural processes inherent in strategic management, encompassing strategic analysis, formulation, implementation, and evaluation, thereby honing strategic leadership competencies essential for organizational success.
4. Conclude comprehensive “analyses of the internal and external environments of healthcare organizations”, employing strategic frameworks and tools to discern critical factors influencing strategic decision-making, such as regulatory compliance, market dynamics, and stakeholder expectations.
5. Formulate compelling vision, mission, and objectives tailored to the unique needs and aspirations of healthcare organizations, integrating strategic foresight and stakeholder perspectives to articulate a strategic direction aligned with organizational values and societal imperatives.
6. Explore the foundational theories and diverse approaches underpinning strategic management, including classical, evolutionary, and resource-based perspectives, fostering a deep understanding of strategic decision-making paradigms relevant to the evolving healthcare landscape.

Unit 1: Introduction

1.1 Levels of Strategy, 1.2 Characteristics of Strategic Decision, 1.3 The Level and Orientation of the Strategy (Corporate, Divisional, Organizational and Functional Level)

Unit 2: Strategic Management Process: Components

2.1 Mission, 2.2 Organizational Profile, 2.3 External Environment Analysis 2.4 Long term Objectives, 2.5 Grand Strategy, 2.6 Annual Objectives, Functional Strategies, Policies, Institutionalizing the Strategy, Evaluation and Control

Unit 3: Strategic Thinking Map – Hierarchy of Strategic Decisions and Alternatives

1. **Directional Strategies:** 3.1.1 Vision, 3.1.2 Mission, 3.1.3 Values and 3.1.4 Goals.
2. **Adaptive Strategies:** 3.2.1 **Expansion of Scope** (Diversification, Vertical Integration, Market Development, Product Development, Penetration); 3.2.2

Contraction of Scope (Divestiture, Liquidation, Harvesting, Retrenchment); **3.2.3 Maintenance of Scope** (Enhancement, Status Quo)

3. Market Entry Strategies: **3.3.1 Purchase** (Acquisition, Licensing, Venture Capital, Investment), **3.3.2 Cooperation** (Merger, Alliance, Joint Venture), **3.3.3 Development** (Internal Development, Internal Venture)

4. Competitive Strategies: **3.4.1 Strategic Posture** (Defender, Prospector, Analyzer,) **3.4.2 Positioning** (Market wide, Cost Leadership, Differentiation) (Market Segment (Focus/Cost Leadership, Focus/Differentiation)

5. Implementation Strategies: **3.5.1 Service Delivery** (Pre-service, Point-of-service, After-service), **3.5.2 Support** (Culture, Structure, Strategic Resources) **3.5.3 Unit Action Plans** (Objectives, Actions, Timelines, Responsibilities)

Unit 4: External Environment Analysis

4.1 Need, 4.2 Goals, 4.3 Limitations, 4.4 Description, 4.5 General Environment, 4.6 Healthcare Environment and Information, 4.7 Process: Scan, Monitor, Forecast and Assess, 4.8 Tools and Techniques: PESTLE Analysis, Porter's Five Forces Analysis, BCG Matrix.

Unit 5: Internal Environment Analysis

5.1 Objectives, 5.2 Culture, 5.3 Management Subsystem and Information Subsystem, 5.4 SWOT, 5.5 TOWS, 5.6 Audit Checklist of Strengths and Weaknesses

Suggested Reading:

Text Books

1.W. Jack Duncan, Peter M. Ginter and Linda E. Swayne, Strategic Management of Health Care Organizations (Blackwell Publishers, Massachusetts, USA) ISBN 1-55786-534-5

References

1. John A. Pearce II and Richard B. Robinson Jr., Strategic Management: Strategy Formulation and Implementation (AITBS Publishers and Distributors, Delhi)

2. Roger Kropf and et al, Strategic Analysis for Hospital Management (Aspen Publication, USA)

Course Title: Conflict Management and Negotiation for Healthcare Workers

Course Code : MBA(HC&HM) 6010

Course Credit: 3 Lectures + 1 Tutorial (4 credits)

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: To equip with the knowledge and skills to effectively manage industrial relations, handle conflicts, and conduct negotiations within the healthcare sector, in compliance with labour laws and international laws.

Course Outcome: Upon completing of this course, the student will be able to

1. Make use of the concept and importance of industrial relations in healthcare.
2. Analyze the trends in industrial disputes and their impact on healthcare delivery.
3. Select the process of collective bargaining and the role of settlement machinery in dispute resolution.
4. Evaluate the role of government and labour policy in India in the context of industrial relations.
5. Choose the application of international laws in the Indian context.

Unit 1: Introduction to Industrial Relations [9 Lecture Hours + 3 Tutorial Hours]

1.1 Definition and Concept of Industrial Relations. 1.2 Parties in Industrial Relations: Management and Trade Unions. 1.3 Importance of Industrial Relations in Healthcare. 1.4 Bi-Partite Forums, Trade Unions, Standing Orders

Unit 2: Industrial Disputes [9 Lecture Hours + 3 Tutorial Hours]

2.1 Definition and Causes of Industrial Disputes. 2.2 Trends in Industrial Disputes in the Healthcare Sector. 2.3 Impact of Industrial Disputes on Healthcare Delivery. 2.4 Notice of Change Voluntary Reference of Disputes to Arbitration Mechanism for Resolution of Industrial Disputes, Strikes And Lock-Outs/Off, Retrenchment and Closure, Unfair Labour Practices, Offences, Penalties.

Unit 3: Collective Bargaining and Settlement Machinery [9 Lecture Hours + 3 Tutorial Hours]

3.1 Concept and Importance of Collective Bargaining. 3.2 Process of Collective Bargaining in the Healthcare Sector. 3.3 Role of Settlement Machinery in Resolving Disputes

Unit 4: Role of Government and Labour Policy in India [9 Lecture Hours + 3 Tutorial Hours]

4.1 Role of Government in Industrial Relations. 4.2 Overview of Labour Policy in India. 4.3 Impact of Labour Policy on Healthcare Workers. 4.4 IRC 2020

Unit 5: International Laws and Industrial Relations [9 Lecture Hours + 3 Tutorial Hours]

5.1 Overview of International Labour Laws. 5.2 Application of International Laws in Indian Context. 5.3 Case Studies: Impact of International Laws on Indian Healthcare Sector

Suggested Readings:

Text Books

1. "Industrial Relations and Labour Laws", by S.C. Srivastava
2. "Dynamics of Industrial Relations", by C.B. Mamoria and Satish Mamoria
3. "International Labour and Employment Laws", by William Keller and Timothy Darby
4. NEGOTIATION AND CONFLICT MANAGEMENT. MIT open learning
5. Industrial Rules. Ministry of Labour & Employment, Govt of India.
<https://labour.gov.in/industrial-relations>
6. IRC 2020. Ministry of Labour & Employment, Govt of India.
https://labour.gov.in/sites/default/files/ir_as_passed_by_lok_sabha.pdf

Course Title: Medical Ethics, Law and Etiquette

Course Code: MBA(HC&HM) 6011

Credits: 3 Lecture + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Objective: To enable students to integrate legal, ethical, and professional dimensions into the fabric of healthcare management, fostering a holistic approach to governance and decision-making.

Outcomes:

Students will be able to -

1. Make use of the knowledge and skills related to the legal, regulatory, and administrative requirements for establishing and managing hospitals.
2. Compare ethical principles and standards governing medical practice and analyse ethical dilemmas commonly encountered in healthcare settings, apply ethical reasoning to make informed decisions, and demonstrate ethical behaviour in patient care, research, and professional interactions.
3. Examine the medico-legal aspects related to medical records, including confidentiality, privacy, documentation standards, and legal requirements for record-keeping.
4. Distinguish different legal and statutory obligations and responsibilities of healthcare professionals towards different act and licenses applicable for medical practice in India.
5. Evaluate the “Biomedical Waste (Management and Handling) Rules” and “The Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulations”.

Unit 1: Hospital Establishment [9 Lecture Hours + 3 Tutorial Hours]

1.1 Formation of Society 1.2 Law of Partnership 1.3 The Companies Act 1.4 Model Constitution for a Hospital, 1.5 The West Bengal Clinical Establishment Act, 1.6 Medical Council of India, 1.7 Medical Licensure Law, 1.8 The Consumer Protection Act, 1.9 District Medical and Health Office Registration.

Unit 2: Medical Ethics [9 Lecture Hours + 3 Tutorial Hours]

2.1 Definition of medical ethics, 2.2 Confidentiality and Privacy, autonomy, beneficence, non-maleficence, and justice, 2.3 Euthanasia, 2.4 Reproductive Ethics, Abortion, 2.5 Clinical Research, 2.6 Doctor-Patient Relationship, 2.7 Medical Malpractice & Negligence 2.8 Quality and Standard of Medical Care, 2.9 Emergency Care, 2.10 Hippocratic Oath, 2.11 Geneva Declaration, 2.12 Managing violence at the workplace.

Unit 3: Medico-Legal Aspects of Medical Record [9 Lecture Hours + 3 Tutorial Hours]

3.1 Code of Ethics for the Medical Record Officers, 3.2 Concept of Medical Record Ownership 3.3 Privileged Communication and Confidentiality 3.4 Release of Information (To the Patient, To Authorized Persons or Agencies) 3.5 Legal issues of breach of Information to unauthorized Persons/Agencies.

3.6 Consents: 3.6.1 Types, Validity, Invalidity blanket, and Improper Consents. 3.6.2 Corrections and identification of data in medical documentations 3.6.3 Patients' Rights and responsibilities 3.6.4 Medical Record in a Court of Law 3.6.5 Retention of Medical Records: Legal requirements NABH, MLC, Govt Regulations, Insurance Companies etc.)

Unit 4: Medico Legal Commitments [9 Lecture Hours + 3 Tutorial Hours]

4.1 Mental Illness in Medical treatment 4.2 Documentation in case of Tuberculosis 4.3 Documentation of Drugs Addicts and Alcoholics, 4.4 Legal Issue & Required documentation in Death Cases 4.5 Legal Testimony in Medico-Legal cases, 4.6 Narcotic Laws 4.7 The Drugs and Cosmetic Act, 4.8 Drug Control Policy, 4.9 Pharmacy License / Renewal Certificate to Sell, 4.10 stock or Exhibit or offer for sale or distribute Drugs (Retail Drug License for Pharmacy), 4.11 RS1 License, 4.12 Methanol License, 4.13 Schedule X for Ketamine, 4.14 Clinical Investigation, 4.15 Blood Transfusion 4.16 The Medical Termination of Pregnancy Act (MTP) 4.17 The PC-PNDT Act, 4.18 Dying Declaration, 4.19 Medical Jurisprudence, 4.20 The Human Organ Transplantation Act, 4.21 Toxicology.

Unit 5: Hospital Administration [9 Lecture Hours + 3 Tutorial Hours]

5.1 The Biomedical Waste Management Handling Rules, 5.2 Exemption of Income Tax for Donations, 5.3 The Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulations, 2002, 5.4 Tax Obligations: Filing Returns and Deductions at Source.

Suggested Reading:

Text Books

1. N.D. Kapoor, Elements of Mercantile Law (Sultan Chand and Sons, New Delhi) ISBN 8170142067
2. Raj Kumar, Acts Applicable to Hospitals in India (The Christian Medical Association of India, New Delhi)

References

1. Anand, R. C., & Satpathy, S. Hospital Waste Management: A Holistic Approach. Jaypee Brothers.
2. Chaube, R. K.. Consumer Protection and The Medical Profession with Legal Remedies. New Delhi, India: Jaypee Brothers. (ISBN 8171797318)

Course Title: Hospital Finance

Course Code: MBA(HC&HM) 6012

Credits: 3 Lecture + 1 Tutorial

Hours: (45 Lecture Hours + 15 Tutorial Hours)

Objective: To equip students with the essential knowledge and skills required to understand and manage hospital finances effectively, covering topics such as fundamental principles, budgetary control, financial decision-making, and fundraising strategies for medical treatments.

1. **Understand the fundamentals of hospital finance:** Students will demonstrate a comprehensive understanding of the unique financial challenges and opportunities within the healthcare sector, including revenue streams, cost structures, and regulatory considerations.
2. **Apply marginal costing and budgetary control techniques:** Students will be able to apply marginal costing principles to analyze the costs and profitability of healthcare services, and implement budgetary control measures to monitor and manage expenses effectively.
3. **Develop hospital budgets:** Students will be proficient in developing comprehensive “hospital budgets, including operating budgets, capital budgets, and cash budgets”, aligned with organizational goals and strategic priorities.
4. **Make informed financial decisions:** Students will develop the ability to evaluate financial data, assess investment opportunities, and make sound financial decisions to optimize resource allocation and support long-term sustainability in hospital operations.
5. **Implement fundraising strategies for medical treatments:** Students will learn effective fundraising techniques and strategies specific to medical treatments, including grant writing, donor cultivation, and crowdfunding, to support patients in need and enhance hospital resources for healthcare delivery.

UNIT 1 Fundamentals of Hospital Finance [9 Lecture Hours + 3 Tutorial Hours]

1.1 Need, Importance of Financial Discipline 1.2 objectives of financial management, 1.3 wealth Maximization, 1.4 Basic Concepts: Liquidity, Profitability and Leverage 1.5 Role of Finance Controller and Responsibility Accounting 1.6 Time value of money, 1.7 Ceiling Prices & Essential Medicines.

UNIT 2 Marginal Costing & Budgetary Control: [9 Lecture Hours + 3 Tutorial Hours]

2.1 Marginal Costing – Concept & Meaning, 2.2 Profit Volume (P/V) Ratio and Break Even Point, 2.3 Preparation of Break Even Chart 2.4 Profit Planning, 2.5 Concepts of Budget and Budgetary Control, 2.6 Preparation of cash and flexible budget

UNIT 3 Hospital Budgeting [9 Lecture Hours + 3 Tutorial Hours]

3.1 Need, 3.2 Elements, 3.3 Stages & Terms of Budgeting, 3.4 Operating Budget: Activity/Zero Based Budgeting, 3.5 Capital Budgeting, 5.6 Return on Investment, 3.6 Problems of Budgeting in Hospitals and Solution

UNIT 4 Financial Decisions [9 Lecture Hours + 3 Tutorial Hours]

4.1 Working Capital Management, 4.2 Sources and Application of Fund, 4.3 Analysis of Financial Statements, 4.4 Financial Performance of Hospital, 4.5 Financial Planning:

Short Term and Long Term. 4.6 Financing of Health, 4.7 Analysis of Need for Fund for Research, Development and Expansion 4.8 Financial Information System and Reporting, 4.9 Investment Management, 4.10 Initial Public Offering (IPO) in Hospitals, 4.11 Financial Governing Bodies in India: RBI, SEBI, IRDAI, MCA.

UNIT 5 Fundraising for Medical Treatments [9 Lecture Hours + 3 Tutorial Hours]

5.1 Fundraising in Healthcare 5.2 The Art of Fundraising, 5.3 Donor Markets and its Analysis 5.4 Organizing for Fundraising, 5.5 Fundraising Goals and Strategies, 5.6 Fundraising Tactics, 5.7 Evaluating Fundraising Effectiveness, 5.8 Cloud Funding. 5.9 RBI & SEBI Guidelines

Suggested Reading:

Text Books:

1. Steven F. Kukla, Cost Accounting and Financial Analysis for the Hospital Administrator (American Hospital Publishing Inc., AHA)
2. M.C. Shukla and T.S. Grewal, Advanced Accounts (S.Chand & Company Ltd., New Delhi) ISBN 81-219-0396-3
3. S.C. Kuchhal, Corporation Finance: Principles and Problems (Chaitanya Publishing House, Allahabad)

References:

1. VHAI, An Accounting Guide for Voluntary Hospitals in India (The Voluntary Health Association of India, New Delhi)

Additional Resources:

1. "Healthcare Finance: An Introduction to Accounting and Financial Management" by Louis C. Gapenski
2. "Financial Management for Nurse Managers and Executives" by Cheryl Jones
3. "Cost Accounting in Healthcare: A Comprehensive Guide" by Steven A. Finkler, David M. Ward, and Thad Calabrese

Tutorials:

3. "Healthcare Finance and Budgeting" (LinkedIn Learning)
4. "Accounting Basics for Healthcare Professionals" (YouTube Playlist)

MOOCs: (indicative)

5. Coursera - "Financial Management in Health Services"
6. edX - "Healthcare Finance and Financial Management"
7. <https://www.coursera.org/learn/introduction-to-healthcare-finance>
8. <https://www.coursera.org/learn/introduction-to-healthcare-accounting#modules>

Minor/Specialization – Track 1 Healthcare Management

Course Title: National Health Policies and Programs

Course Code: MBA(HC&HM) 6013

Credits: 3 Lecture + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Objective: To provide students with a comprehensive understanding of National Health Policies & Programs and to critically analyze and contribute to the enhancement of healthcare policies and programs, and apply that knowledge in healthcare industry.

Outcomes:

Students will be able to -

1. Make use of comprehensive understanding of the structure, organization, and key components of the Indian healthcare system.
2. Examine the objectives, and implementation strategies of national health policies in India, and its impact on public health outcomes, healthcare delivery, and health equity, and propose recommendations for policy improvement and alignment with global health priorities.
3. Appraise major health programs implemented in India, including their goals, strategies, implementation mechanisms, and outcomes
4. Assess disease control programs implemented in India, focusing on prevention, surveillance, and management of communicable and non-communicable diseases.
5. Examine the impact of national health programs and policies on disease burden reduction, healthcare infrastructure strengthening, and community engagement, and propose evidence-based strategies for improving program effectiveness and sustainability.

Unit 1: Introduction to Indian Healthcare System [9 Lecture Hours + 3 Tutorial Hours]

1.1 Overview of the Indian healthcare system, 1.2 Evolution of healthcare policies in India, 1.3 Key stakeholders and their roles in healthcare delivery, 1.4 Importance of Knowledge on National Health Policies and Health Programmes for Healthcare Managers

Unit 2: National Health Policies in India [9 Lecture Hours + 3 Tutorial Hours]

2.1 National Health Policy (NHP) frameworks, 2.2 Analyzing the objectives and components of NHPs, 2.3 Evaluating the impact of NHPs on healthcare management

Unit 3: Major Health Programs in India [9 Lecture Hours + 3 Tutorial Hours]

3.1 Reproductive Maternal Newborn Child and Adolescent Health (RMNCH+A) programs: Basic understanding and salient features

3.2 National Health Mission (NHM): Basic understanding and salient features

3.3 Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and other insurance schemes e.g., Swasthya Sathi: Brief introduction and salient features

Unit 4: Disease Control Programs [9 Lecture Hours + 3 Tutorial Hours]

4.1 National Vector Borne Disease Control Program (NVBDCP), 4.2 National

Tuberculosis Elimination Program (NTEP), 4.3 National AIDS Control Program (NACP), 4.4 National Programme for Prevention And Control Of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), 4.5 Other national programmes and related health issues

Unit 5: Evaluation and Future Directions [9 Lecture Hours + 3 Tutorial Hours]

5.1 Monitoring and evaluation of healthcare policies and programs, 5.2 Challenges and opportunities in implementing national health programs, 5.3 Future trends and policy implications for healthcare management

Suggested Reading:

Text Books

1. Reddy, K. S., & Patel, V. (2018). *National Health Systems of India: The Challenge of Equity and Quality*. Oxford University Press.
2. Frenk, J., & Moon, S. (2013). *Governance Challenges in Global Health*. New England Journal of Medicine.
3. Ministry of Health and Family Welfare, Government of India - *National Health Policy 2017*.
4. Public Health Foundation of India - *Healthcare in India: Key Trends, Challenges and Innovations*.
5. Kishore J. NATIONAL HEALTH PROGRAMS OF INDIA. Century Publications
6. Ministry of Health and Family Welfare, Government of India - *Operational Guidelines for NRHM and NUHM*.
7. Park K. Park's Textbook of Preventive and Social Medicine.

Journals:

1. *Indian Journal of Community Medicine*
2. *Health Policy and Planning*
3. *Indian Journal of Public Health*

Online Resources: (indicative)

1. National Health Mission, India: <https://nhm.gov.in/>
2. Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana: <https://pmjay.gov.in/>
3. PIB. <https://pib.gov.in/pressreleaseshare.aspx?prid=1576128>
4. MoHFW. <https://www.mohfw.gov.in/>
5. NHM. <https://www.nhm.gov.in>
6. Niti Aayog. <https://niti.gov.in/>
7. Public Health Care Open Courses. SAKSHAM. NIHFV. <https://lmis.nihfw.ac.in/?lang=en>

Minor/Specialization – Track 1 Healthcare Management

Course Title: Project Management in Healthcare

Course Code: MBA(HC&HM) 6014

Credits: 3 Lecture + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Objective: To take part in project management within the healthcare domain, focusing on the systematic management of programs encompassing planning, execution, control, and evaluation. Besides, involving the essential elements of “forecasting, budgeting, resource mobilization, utilization of tools and techniques, scheduling, and rigorous evaluation methodologies”.

Outcomes:

Students will be able to -

1. Improve the management of health programs through continuous learning from previous projects.
2. Implement project-based methodologies for the management of healthcare programs, integrating project management principles to enhance organizational efficiency and effectiveness.
3. Demonstrate proficiency in program planning, execution, and review processes, leveraging project management techniques to ensure strategic alignment and operational excellence.
4. Apply operations research tools and methodologies to optimize program management processes, enhancing decision-making capabilities and resource utilization within healthcare settings.
5. Develop comprehensive project proposals for healthcare programs, integrating strategic objectives, resource requirements, risk assessments, and evaluation frameworks to support informed decision-making and stakeholder engagement.

Unit 1: Fundamentals [9 Lecture Hours + 3 Tutorial Hours]

1.1 Programme, Project, Tasks, Subtasks, Sub-subtasks, 1.2 Linking Vision, Mission and Strategic Plans to Project, 1.3 Needs Analysis, 1.4 Project Characteristics, 1.5 Advantages of Project Framework for Health Programme, 1.6 Project Life Cycle

Unit 2: Project Planning [9 Lecture Hours + 3 Tutorial Hours]

2.1 Problem Analysis (Cause and Effect) 2.2 Developing Project Objectives, 2.3 Planning Cycle 2.4 Forecasting the Project: (Time Series Analysis, Correlation, Regression and Delphi Technique) 2.5 Project Implementation Plan, 2.6 Proposal Writing, 2.7 Budgeting the Resources.

Unit 3: Planning Tools and Techniques [9 Lecture Hours + 3 Tutorial Hours]

3.1 Introduction to Operational Research, 3.2 Estimation, 3.3 Contingency planning, 3.4 Concept of Milestones in Project 3.5 Application of Gantt Chart, 3.6 Programme Evaluation and Review Technique (PERT), 3.7 Critical Path Method (CPM), 3.8 Transportation Model, 3.9 Single Channel and Multi-Channel Queuing Models

Unit 4: Project Manager, Execution and Implementation [9 Lecture Hours + 3 Tutorial Hours]

4.1 Roles and responsibilities of Project Manager 4.2 Time Management 4.3 Risk Management 4.4 Factors of Successful Projects 4.5 Project Tracking Methods 4.6 Project Activities: Regular Monitoring & Reviewing Progress, Re-plan 4.8 Record keeping and Reporting.

Unit 5: Project Disengagement [9 Lecture Hours + 3 Tutorial Hours]

5.1 Review and Assessment 5.2 Evaluation and Analysis, 5.3 Feedback and Review 5.3 Audit Trail and record keeping 5.4 Promote Achievements.

Suggested Reading:

Text Books

1. Deepro, D. Project Management. Oxford, UK: Capstone Publishing.
2. Kerzner, H. Project Management: A Systems Approach to Planning, Scheduling, and Controlling. New York, NY: Wiley Eastern.
3. Swarup, K., & et al. Operations Research. New Delhi, India: Sultan Chand and Sons.

References

1. www.ipma.world (International Project Management Association)
2. www.prince2.com ((Projects in Controlled Environments)
3. www.pmi.org (Project Management Institute)

Minor/Specialization – Track 2 Hospital Management

Course Title: Entrepreneurship and New Venture Planning

Course Code: MBA(HC&HM) 6015

Course Credits: 3 Lecture + 1 Tutorial

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: To equip with extant knowledge, skills, and mindset necessary to pursue entrepreneurial ventures in the healthcare industry. Besides, to foster an entrepreneurial mindset to address challenges, seize opportunities, and contribute positively to the healthcare ecosystem.

Course Outcome: Upon completing of this course, the student will be able to

1. Explain the meaning and concept of entrepreneurship, including its role in fostering innovation and its contributions to society.
2. Identify and assess challenges associated with innovation, manage the innovation process effectively, and cultivate divergent and convergent thinking skills.
3. Explore the factors determining competitive advantage, conduct market segmentation, analyze industry dynamics, and assess demand-supply dynamics to identify opportunities for new ventures.
4. Make use of entrepreneurial motivation theories, including achievement motivation theory, and apply design thinking-driven innovation principles and harvesting strategies.
5. Assess government schemes and incentives for entrepreneurship, incubation, acceleration, and various funding sources for new ventures, including bootstrapping, crowdsourcing, and angel investors. Additionally, understand the efforts of the Government of India in promoting entrepreneurship and innovation through initiatives such as SISI, KVIC, DGFT, SIDBI, Defense, and Railways.
6. Develop skills in preparing applications and project reports essential for securing funding and support for entrepreneurial ventures.

Unit:1. Introduction: [9 Lecture Hours + 3 Tutorial Hours]

1.1 Meaning and Concept of Healthcare Entrepreneurship, 1.2 Concept of Innovation in entrepreneurship, 1.3 Entrepreneur's Contributions to society.

Unit 2. Innovation: [9 Lecture Hours + 3 Tutorial Hours]

2.1 Challenges of Innovation, 2.2 Steps in Innovation Management, 2.3 Idea Management System, 2.4 Divergent v/s Convergent Thinking, 2.5 Qualities of a prospective Entrepreneur

Unit 3. Idea Incubation: [9 Lecture Hours + 3 Tutorial Hours]

3.1 Factors determining competitive advantage, 3.2 Market segment, 3.3 blue ocean strategy, 3.4 Industry and Competitor Analysis (market structure, market size, growth potential), 3.5 Demand-supply analysis

Unit4. Entrepreneurial Motivation: [9 Lecture Hours + 3 Tutorial Hours]

4.1 Design Thinking, 4.2 Driven Innovation, 4.3 TRIZ (Theory of Inventive Problem Solving), 4.4 Achievement motivation theory of entrepreneurship, 4.5 Theory of McClelland, 4.6 Harvesting Strategies. 4.6 Top HealthTech Startups in India

Unit 5. Entrepreneurial Information: [9 Lecture Hours + 3 Tutorial Hours]

5.1 Government incentives for entrepreneurship, 5.2 Incubation, 5.3 acceleration. 5.4 Funding new ventures, 5.4.1 bootstrapping, 5.4.2 crowd sourcing, 5.4.3 angel investors, 5.5 Government of India's efforts at promoting entrepreneurship and innovation: 5.5.1 Startup India, 5.5.2 Make in India, 5.5.3 Atal Innovation Mission (AIM), 5.5.4 Support to Training and Employment Programme for Women (STEP), 5.5.5 Jan Dhan-Aadhaar - Mobile (JAM) 5.5.6 Digital India, 5.5.7 Stand-Up India, 5.5.8 Trade related Entrepreneurship Assistance and Development (TREAD), 5.5.9 Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 5.5.10 National Skill Development Mission, 5.5.11 Science for Equity Empowerment and Development (SEED), 5.6 Applications and Project Reports Preparation

Suggested Reading:

Text Books

1. Innovation and Entrepreneurship by Drucker, P.F.; Harper and Row
2. Business, Entrepreneurship and Management: Rao, V.S.P. ;Vikas
3. Entrepreneurship: Roy Rajeev; OUP.

Minor/Specialization – Track 2 Hospital Management

Course Title: Operations Research for Decision Making

Course Code: MBA(HC&HM) 6016

Course Credit: 4 (3L + 1T)

Hours: 45 Lecture Hours + 15 Tutorial Hours

Course Objective: To equip with the essential concepts and techniques in operations research tailored to healthcare settings necessary to optimize hospital systems, enhance decision-making processes, and improve overall efficiency in healthcare administration.

Course Outcome: Upon completing of this course, the student will be able to

1. Explain key operational research concepts and their applications in healthcare.
2. Develop proficiency in modeling and solving common optimization problems specific to hospital administration.
3. Utilize data and analytical tools for improving efficiency, resource allocation, and patient flow in hospital operations.
4. Demonstrate the ability to translate quantitative insights into actionable operational improvements.

Unit 1: Introduction to Operations Research in Healthcare [9 Lecture Hours + 3 Tutorial Hours]

1.1 Operations Research (OR) in hospital systems: definition, techniques, role, limitations, challenges. 1.2 Case studies showcasing OR techniques for improving patient flow, bed management, resource allocation, and scheduling.

Unit 2: Linear Programming for Healthcare Optimization [9 Lecture Hours + 3 Tutorial Hours]

2.1 Formulation of linear programming (LP) problems in healthcare. 2.2 Graphical solutions and interpretation for small problems. 2.3 Software-based solutions using tools like Excel Solver, emphasizing problem setup and understanding outputs. 2.4 Case studies: Using LP to optimize bed utilization, operating room schedules, and staff shift optimization.

Unit 3: Decision Analysis for Patient Flow & Capacity Management [9 Lecture Hours + 3 Tutorial Hours]

3.1 Decision trees: Modeling sequential decisions under uncertainty. 3.2 Expected value calculations and sensitivity analysis. 3.3 Basic queuing theory: Understanding arrival rates, service times, queue lengths, and their impact on patient wait times. 3.4 Introduction to simulation modeling for complex patient flow scenarios. 3.5 Decision Theory – Under uncertainty, certainty, under risk

Unit 4: Resource Allocation & Scheduling [9 Lecture Hours + 3 Tutorial Hours]

4.1 Project management with PERT/CPM: Network analysis for planning and managing healthcare projects. 4.2 Lean principles for identifying and reducing waste in healthcare processes. 4.3 Introduction to staffing models and optimization techniques.

Unit 5: Transformation Problem and Assignment Problem and contemporary issues[9 Lecture Hours + 3 Tutorial Hours]

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5.1 Transformation Problem-N-W Corner Rule, Matrix, Minimax, VAM, MODI. 5.2. Assignment problem- Hungarian Method 5.3. Introduction to OR Tools: COIN-OR, SAS/OR, Google OR-Tool, open source packages e.g., pyomo for python.

Suggested Reading:

Text Books

1. "Operations Research" by Kanti Swarup, P.K. Gupta
2. "Operations Research" by Handy A Taha (PHI)
3. "Operations Research" by V.K. Kapoor (Sultan Chand and Sons)
4. "Operations Research" by Hiller & Liberman (TMH)
5. "Operations Research" by Majumdar and Nandi (Pen and Paper Publication)

Additional Suggested Readings and Resources

1. "Introduction to Operations Research" by Frederick S. Hillier, Gerald J. Lieberman
2. "Operations Research: An Introduction" by Taha H.
3. "Operations Research: An Introduction" by Hamdy A. Taha
4. "Queuing Theory and its Applications: A Personal View" by Armand W. Krieger
5. MIT Open Course Ware

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