

Two-Year Postgraduate Programme

Master of Hospital Administration (MHA)

Faculty of Medicine

Parul Institute of Public Health
Parul University

Vadodara, Gujarat, India

Faculty of Medicine Parul Institute of Public Health Master of Hospital Administration (MHA)

1. Vision of the Department

To empower students and develop well educated Public Health professionals, who have ability to address Public Health needs with application of Public Health principles, values, evidence based medicine and practice.

2. Mission of the Department

Provide an excellent, competency –based, interdisciplinary education, incorporating our core values of scholarship and leadership, scientific rigor and policy analysis, and training to foster the next generation of thought leaders, practitioners and scientists to preserve and promote health for all.

3. Program Learning Outcomes

Upon completion of the programme, the hospital administration graduates will able to:

PLO1	Education:	Provide hospital administration education that equips students for a healthcare administration career				
PLO2	Critical Thinking	Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.				
PLO3	Research	Undertake evidence-based research and application of knowledge into hospital administration sector so to evaluate the services of the healthcare facilities through evidence-based practice of the profession, and to ensure delivery of quality health services and positive health outcome.				
PLO4	Leadership	Apply principles of leadership, management, and governance for fostering collaboration, problem solving and decision making in healthcare administration arena				
PLO5 The Healthcare Administration Apply reasoning informed by the contextual knowled assess societal, health, safety, legal and cultural issue						

	Professional and Society	consequent responsibilities relevant to the professional healthcare administration practices
PLO6	Environment and sustainability:	Understand the impact of the professional healthcare administration solutions in societal and environmental contexts of healthcare settings, and demonstrate the knowledge of, and need for sustainable development.
PLO7	Ethics:	Apply ethical principles; adhere to professional ethics, responsibilities, and norms of the healthcare administration practice
PLO8	Individual and team work:	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings
PLO9	Communication	Communicate effectively on complex healthcare administration activities with the community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PLO10	Project Management and Finance	Demonstrate knowledge and understanding of the healthcare administration and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PLO11	Lifelong Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change in healthcare settings.

4. Program Specific Learning Outcomes

In addition to the specified POs, the hospital administration graduates will also be able to:

PSO1	Understand fundamentals of healthcare administration and apply these competencies in hospital management in a creative, innovative, and entrepreneurial outlook.
PSO2	Apply concepts of management principles, financial aspects, quality standards, statistical implications, human resource management, strategic management &business models, hospital information management system, marketing management and laws & ethics in hospital administration sector.
PSO3	Apply the advance practical knowledge in the field of healthcare administration for improving the health service provisions to the people and contribute in nation building while upholding ethical practices
PSO4	Perform managerial leadership in healthcare industry.
PSO5	Act as a catalyst for sustainable growth through specialized executive abilities, as required for effective functioning of the units/teams in healthcare facilities.

5. Credit Framework

Semester	Credit
Semester -1	21
Semester -2	31
Semester -3	25
Semester -4	19
Total	96

6. Program Curriculum

	NAME OF THE PROGRAMME: MASTER OF HOSPITAL ADMINISTRATION											
SR.	YEAR	SEMESTER	CODE	COURSES								
NO.												
1		1	19204209	Introduction to Hospital Administration								
2	1 19204210 Principles of Management 1 19204211 Basics of Epidemiology											
3				1 01								
4			1 19204211 Basics of Epidemiology 1 19204212 Basics of Biostatistics 1 19204213 Hospital and Healthcare Systems (Theory)									
5		1	19204213	Hospital and Healthcare Systems (Theory)								
				 Field visits and Hospital postings (Practical) 								
6		1	19204214	Organizational Behaviour								
7	YEAR	1	19204215	Health Economics for Hospital Management								
8	I	2	19204216	Internship								
9		2	19204217	Research Methodology & Research Ethics								
10		2	19204218	Control Systems for Hospital Management								
11		2	19204219	Human Resource Management								
12		2	19204220	Operations Research								
13		2	19204221	Operations Planning and Finance Management								
14		2	19204222	Soft Skills for Health Administrators								
15		3	19204223	Logistics & Supply Chain Management								
16		3	19204224	Hospital Marketing and Health Promotion								
17		3	19204225	Quality Management and Accreditation of								
				Hospitals								
18		3	19204226	Health Insurance and Medical Tourism								
19	YEAR	3	19204227	Hospital Development and Infrastructure								
	II			Planning								
20		3	19204228	Risk Planning and Disaster Management								
21		3	19204229	Legal and Ethical Issues in Hospital								
				Administration								
22												
23		4	19204233	Scientific Writing								
24		4	19204234	Dissertation								
Electi	ve Cours											
1		3	19204230	0								
2	YEAR	3	19204231	Entrepreneurship in Healthcare Sector								
3	II	3	19204232	Leadership in Healthcare								

				Credits	S	Teac	hing so	cheme			Ex	kamina	ation S	cheme
			Total	Theory	Practical					Inte	rnal	Ext	ernal	Total
Sr. No.	Code	Subject Name				Tota l Hrs	Lect Hrs	Pra c Hrs	Int · T H	Int PR	СЕ	Ext. TH	Ext. PR	
1	19204209	Introduction to Hospital Administration	2	2	-	32	32	-	20	-	20	60	-	100
2	19204210	Principles of Management	4	4	-	64	64	-	20	1	20	60	1	100
3	19204211	Basics of Epidemiology	2	2	-	32	32	-	20	-	20	60	-	100
4	19204212	Basics of Biostatistics	2	2	-	32	32	-	20	-	20	60	-	100
5	19204213	Hospital and Healthcare Systems Field visits and Hospital postings	5	2	3	128	32	96	-	20	20	-	60	100
6	19204214	Organizational Behaviour	3	3	-	48	48	1	20	-	20	60	-	100
7	19204215	Health Economics for Hospital Management	3	3	-	48	48	-	20	-	20	60	-	100
	•	GRAND TOTAL	21	18	3	384	288	96	120	20	140	360	60	700

Lect – Lecture, Tut – Tutorial, Prac – Practical, Int. TH – Internal Theory, Int. PR – Internal Practical, CE – Continuous Evaluation, Ext. PR – External Practical.

Theory Passing %: 50% Practical Passing %: 50%

				Credit		Tea	ching s	cheme		,	Exami	inatio	n Sche	me
S	_		Total	Theory	Practical				I	ntern	al	Exte	rnal	Total
N		Subject Name				Tota	Lect Hrs	Pra	Int	Int	CE	Ext. TH	Ext. PR	
						Hrs	1113	Hrs	T H	PR				
1	19204216	Internship	11	-	11	352	-	352	-	20	20		60	100
2	19204217	Research Methodology & Research Ethics	4	4	-	64	64	-	20	-	20	60	-	100
3	19204218	Control Systems for Hospital Management	3	3	-	48	48	-	20	-	20	60	-	100
4	19204219	Human Resource Management	3	3	-	48	48	-	20	-	20	60	-	100
	19204220	Operations Research	3	3	-	48	48	-	20	-	20	60	-	100
6	19204221	Operations Planning and Finance Management	5	5	-	80	80	-	20	-	20	60	-	100
7	19204222	Soft Skills for Health Administrators	2	1	1	48	16	32	-	20	20	60	-	100
		GRAND TOTAL	31	19	12	688	336	384	100	40	140	360	60	700

Lect – Lecture, Tut – Tutorial, Prac – Practical, Int. TH – Internal Theory, Int. PR – Internal Practical, CE – Continuous Evaluation, Ext. PR – External Practical.

Theory Passing %: 50% Practical Passing %: 50%

				Credit	S	Teacl	hing sc	heme			Exan	ninatio	n Sch	eme
Sr. No.	Code	Subject Name	Total	Theory	Practical				I	ntern	al	Exte	rnal	Total
		,				Tota	Lect	Pra	Int	Int	CE	Ext. TH	Ext. PR	
						Hrs	Hrs	Hrs	T H	PR	CL	111	110	
1	19204223	Logistics & Supply Chain Management	3	3	-	48	48	-	20	-	20	60	-	100
2	19204224	Hospital Marketing and Health Promotion	3	3	-	48	48	-	20	-	20	60	-	100
3	19204225	Quality Management and Accreditation of Hospitals	5	4	1	96	64	32	20	-	20	60	1	100
4	19204226	Health Insurance and Medical Tourism	3	3	-	48	48	-	20	-	20	60	1	100
5	19204227	Hospital Development and Infrastructure Planning	3	3	-	48	48	-	20	-	20	60	-	100
6	19204228	Risk Planning and Disaster Management	3	3	-	48	48	-	20	-	20	60	-	100
7	19204229	Legal and Ethical Issues in Hospital Administration	2	2	-	32	32	-	20	-	20	60	ı	100
8		Elective (any one)	3	3	-	48	48	-	20	-	20	60	1	100
		GRAND TOTAL	25	24	1	416	384	32	160	-	160	480	-	800

Lect – Lecture, Tut – Tutorial, Prac – Practical, Int. TH – Internal Theory, Int. PR – Internal Practical, CE – Continuous Evaluation, Ext. PR – External Practical.

Theory Passing %: 50% Practical Passing %: 50%

Semester 3 Elective Courses (Any one)

_			Credits Teaching scheme						Examination Scheme						
Sr. No.	Code	Subje	Total	Theory	Practica				I	ntern	al	Exte	ernal	Total	
140.	Couc	ct			1	Total	Lect	Prac	Int	Int	a n	Ext.	Ext.		
		Name				Hrs	Hrs	Hrs			CE	Th	Pr		
									Th	Pr					
1	19204230	Digital Health and Health Informatics	3	3	-	48	48	-	20	-	20	60	-	100	
2	19204231	Entrepreneurship in Healthcare Sector	3	3	-	48	48	-	20	-	20	60	-	100	
3	19204232	Leadership in Healthcare	3	3	-	48	48	-	20		20	60	-	100	

Sı			Credits			Teaching scheme				eme				
No		Subject Name	Total	Theory	Practical				I	ntern	al	Exte	ernal	Total
		545,0001141110				Tota	Lect	Pra	Int	Int		Ext.	Ext.	
						l	Hrs	С	T.	PR	CE	TH	PR	
						Hrs		Hrs	Ĥ	1 10				
1	19204233	Scientific Writing	2	-	2	64	-	64	-	20	20	1	60	100
2	19204234	Dissertation	17	-	17	544	-	544	-	100	50	-	150	300
	•	GRAND TOTAL	19	-	19	608	-	608	-	120	70	-	210	400

Lect – Lecture, Tut – Tutorial, Prac – Practical, Int. TH – Internal Theory, Int. PR – Internal Practical, CE – Continuous Evaluation, Ext. PR – External Practical.

Theory Passing %: 50% Practical Passing %: 50%

11. Detailed Syllabus

Semester 1

(1)

a. Course Name: Introduction to Hospital Administration

b.Course Code: 19204209

c. Prerequisite: Knowledge of Hospital and public health facilities about graduation level

d. Rationale Orient students with concept of administration in healthcare context and enable them to critically understand role of hospital administration in hospital and healthcare industries

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Overview of Hospital Administration. 1.1 What is hospital? 1.2 What is hospital Administration? 1.3 Introduction to basic terminologies used in a hospital 1.4 Types of Hospitals 1.5 Hospital Services: OPD, IPD, Supportive services, Administrative Services 	20	6
2	 2. Concept of Health & Disease 2.1 What is health? 2.2 Understanding Diseases, Sickness, and Illness. 2.3 Determinants and dimensions of Health 2.4 Concept of Prevention and control. 2.5 Modes of Interventions. 	10	4
3	 3. Role of Hospitals in Healthcare 3.1 History of hospitals 3.2 Hospitals in India- Ancient Period, Colonial Period, post-independence. 3.3 Changing role of Hospitals 3.4 Health Insurances – Types, challenges, and major players. 3.5 Legal issues in Hospitals 	30	10
4	 4. Career as Hospital Administration 4.1 Scope of hospital administration in healthcare industry 4.2 Role of hospital administrator (HA), Chief Executive Officer (CEO), Chief Operating Officer (COO) 4.3 Tasks performed by other executives (Manager (HR, Finance, etc), Head of department/s (nursing, emergency, store etc), Chief Medical Officer, Medical Officer, Head Nurse, Patient coordinator, floor coordinator, 4.4 Job description of HA or manager 4.5 Role of HA in legal matters 	20	6

5	5. Health policies and legal aspects of	20	6
	Hospital Administration		
	5.1 Policy for Concession on Hospital Bill		
	5.2 Policy for Discharge against Medical Advice		
	5.3 Policy for Patient Discharge and Delayed		
	Payment of Hospital Bill		
	5.4 Acts applicable to Health Unit		
	Total	100	32

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests (Summative/MCQ/Open book exam) etc.

- 1. Textbook of Preventive and Social Medicine: K Park.
- 2. Hospital Administration and Management A comprehensive Guide: Joydeep Dasgupta, Jaypee Brothers Medical Publishers (P) Ltd.
- 3. Principles of Hospital Administration and Planning: B M Sakharkar, Jaypee Brothers Medical Publishers (P) Ltd.

- a. Course Name: Principles of Management
- b. Course Code: 19204210
- c. Prerequisite: Basic knowledge about Hospital and public health facilities up to graduation level.
- d. Rationale: Enable students to critically understand principles of management and equip them with strategic management skill

COURSE CONTENTS

Unit	Topics	Weightage	Teaching Hours
No. 1	1. Nature of Management	(%) 10	7
1	1.1 Concept of management	10	/
	1.2 Management and Administration		
	1.3 Importance of management		
	1.4 History of management – key management theories		
	1.5 Applying Management Theory in Practice		
2	2. Organizational change and Fundamentals of Planning,	15	11
	Organizing, Controlling, and Directing		
	3.1 Nature of organizational change		
	3.2 Factors of organizational change		
	3.3 Process of planned change:		
	3.1.1 Human response to change		
	3.1.2 Resistance to change		
	3.1.3 Overcoming resistance to change		
	3.4 Concept of planning, organizing, controlling, and directing		
	3.5 Nature & its importance		
	3.6 Steps of planning	20	40
3	5. Introduction to strategic management	20	13
	5.1 What is strategy?		
	5.2 Organizational mission: Philosophy, policy, Strategic Intent,		
	vision, mission, values.		
	5.3 Defining strategic management process,		
	5.4 Strategic objectives, Porter's value chain: concept and		
	Applications	20	10
4	4. Strategies in Healthcare	20	13
	4.1 Strengths, Weakness, Opportunities, and Threat Analysis		
	4.2 Corporate Level Strategy: Grand Strategy, Portfolio analysis:		
	BCG Matrix, Blue Ocean strategy		
	4.3 Business level Strategy: Generic Business Strategy		
	4.4 Functional strategy analysis: Plans and policies, financial,		
	marketing, operational, personnel, IT, and Integration		
	4.4 Strategic and Operational aspect of planning		

5	5. Implementation of Strategic Management	35	20
	5.1 Corporate culture, structure, human resource, rewards.		
	5.2 Strategic Evaluation: Brief concept of Bench marking and Balance Score card.		
	5.3 Control of strategies: strategic diagnosis, & operational diagnosis.		
	5.4 Corporate Social Responsibility as strategy for hospital: management and society, culture and management, management ethics, CSR Act and responsibilities of hospital/healthcare organizations		
	Total	100	64

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests (Summative/MCQ/Open book exam) etc.

- 1. Principles of Management (Sixth Edition): James Stoner, Edward Freeman, Daniel Gilbert. Pearson.
- 2. Principles of Management (2 edition): Callie Daum, Vibrant Publishers.
- 3. Principles of Hospital Administration & Planning (2nd Edition): BM Sakharkar. Jaypee Borthers Medical Publishers Pvt. Ltd.
- 4. Principles and Practice of Management: L.M. Prasad Sultan Chand & Sons Publications.
- 5. Harvard Business Review on Strategy for Healthcare: Boston, Massachusetts: USA Publications.
- 6. Strategic Management for nonprofit organizations: Oster Sharon M. Oxford publishers, New Delhi.
- 7. Management Policy and Strategic Management: Srivastava, Himalaya Publications, Mumbai.

(3)

a. Course Name: Basics of Epidemiology

b. Course Code: 19204211

c. Prerequisite: Basics knowledge about Epidemiology up to graduation level

d. Rationale: Epidemiology is vital in understanding disease, its etiology, disease progression and its spread. A thorough understanding of basics of epidemiology will enable the students to understand and appreciate the role of epidemiology in understanding the spread of the diseases. The main focus will be on implementing the basic principles of epidemiology in the hospital settings and thereby take informed decisions.

Course Contents

Unit No.	Topic	Weightage (%)	Teaching Hrs.
1	1. Introduction to epidemiology		
	1.1 Background and History of epidemiology1.2 Principles of epidemiology		
	1.2 Principles of epidefinology 1.3 Natural History of Disease	15	4
	1.4 Dynamics of Disease Transmission		
2	2. Basic definitions		
	2.1 Epidemic, Endemic, Pandemic, Sporadic,	20	6
	Prevalence, Incidence, Specificity, Sensitivity.		
	2.2 Screening and Surveys in the Hospitals.		
3	3. Epidemiological study designs		
	3.1 Descriptive and analytical studies3.2 Cross sectional, Cohort, case control studies.	25	9
	3.3 Importance of epidemiological study designs in		
	Hospitals.		
4	4. Epidemiological Triad.		
	4.1 Host defense	15	4
	4.2 Immunizing agents,		
	4.3 Cold chain, and immunization4.4 Disease monitoring and surveillance.		
5		25	9
) 5	5. Investigation of an epidemic and role of hospital in its control	45	9
	5.1 Practical examples and numerical.		
	Total	100	32

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests (Summative/MCQ) etc.

- 1. Textbook of Preventive & Social Medicine- K. Park
- 2. IASPM-Textbook of Preventive & Social Medicine AM Kadri

a. Course Name: Basics of Biostatistics

b. Course Code: 19204212

c. Prerequisite: Basics knowledge about Biostatistics up to graduation level

d. Rationale: Applications of biostatistics has managerial implications. This course is intended to introduce statistics and biostatistics to hospital administrators as it is the most important tool for data analysis and informed decision making. More emphasis should be given on.

Unit No.	Topic	Weightage (%)	Teaching Hrs.
1	1. Introduction to Statistical Measures.	(10)	
	1.1 Basic Statistical concepts, utility and limitations of Statistics		
	1.2 Variables and Data	15	4
	1.3 Data measurement	15	4
	1.4 Measures of central tendency- Arithmetic Mean, Median, Mode, Quartiles; Measures of Variation, Standard Deviation (basic formula and problems)		
2	2. Presentation of Data and its managerial		
	implications.	25	9
	2.1 Frequency Distributions		
	2.2 Quantitative and Qualitative Data Graphs, Charts and Graphs for two variables Bar Diagram, Histogram, Frequency Polygon, Ogive and their managerial implications		
3	3. Probability		
	3.1 Introduction to Basic probability: Introduction to probability, Methods of Assigning Probabilities, Structure of Probability	15	4
4	4. Distribution, Sampling Techniques and Sample		
	size Calculation.	15	4
	4.1 Probability distributions: Discrete – Binomial		
	and Poisson; Continuous-Normal		
	4.2 Applications to hospital environment		
5	5. Statistical tests	30	11
	5.1 Parametric tests: t-test (paired or unpaired),		
	ANOVA (one-way & two-way), and Pearson rank		
	correlation.		
	5.2 Non-Parametric Tests: Chi Square, Kruskal		
	Wallis Test, Mann-Whitney U Test, Wilcoxon Matched Test, and Sign Test		
	5.3 Introduction to Regression Analysis: Introduction		
	to Simple Regression Analysis, Hypothesis Tests		
	for the slope of the Regression Model and testing		
	the Overall Model, Estimation, Regression to		
	develop a forecasting trend line, Interpreting the		
	output 5.4 Use of Excel Application for Descriptive statistics		
	Total	100	32

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests (Summative/MCQ) etc.

- 1. Textbook of Preventive & Social Medicine- K. Park
- 2. Statistical Tests in Medical Research Jaykaran Charan (Jaypee Brothers Medical Publishers Private Limited)
- 3. Mahajan's Methods in Biostatistics- Arun Bhadra Khanal (Jaypee Brothers Medical Publishers Private Limited).

(5)

a. Course Name: Hospital and Healthcare System

b. Course Code: 19204213

c. Prerequisite: Basis Knowledge about Hospital and Healthcare System

d. Rationale: Hospitals and Healthcare system is huge and complex. Different types of hospitals and both public and private healthcare services play pivotal role in providing healthcare services.

Course Contents

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	1. Hospital and Healthcare System 1.1 Define hospital and healthcare services 1.2 Types of hospital and healthcare services 1.3 Structure of hospital	05	8
2	2. Public Health System 2.1 Overview of public health system 2.2 Public health service structure 2.3 Field visit to public health system	05	8
3	 3. Private Healthcare Sector 3.1 Private healthcare sector 3.2 Healthcare market 3.3 Role of private healthcare sector in population health 3.4 Field visit to private healthcare organization 	05	8
4	4. Public-Private Partnership4.1 Concept of Public-Private Partnership4.2 Examples of Public-Private Partnership	05	8
5	5. Practical Exposure5.1 Field Visits and Hospital Posting	80	96
	Total	100	128

- 1. Textbook of Preventive & Social Medicine- 21st Edition, K. Park (Editor)
- $\textbf{2.} \ \mathsf{IASPM-Textbook} \ \mathsf{of} \ \mathsf{Preventive} \ \& \ \mathsf{Social} \ \mathsf{Medicine-} \ 2^{nd} \ \mathsf{Edition}, \mathsf{AM} \ \mathsf{Kadri} \ (\mathsf{Editor})$

- a. Course Name: Organizational Behavior
- b. Course Code: 19204214
- c. Prerequisite: Conmen sense about behavior in society, knowledge about right and non-right behavior and Professionalism
- d. Rationale: Hospitals being one of the most human resource intensive service sector, Organizational behavior is the basis of increasing productivity and providing optimum quality of care. A thorough understanding of fundamentals underlying the management of an organization and understand the dynamics of organizational behavior will help in channelizing the most important resources towards achieving organizational goals and objectives efficiently.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 1. Introduction to Organization Behavior (OB) 1.1 Concept and nature of OB 1.2 Challenges in OB 1.3 Applying OB Knowledge in management Practices 1.4 Leadership Concept, Difference between Leader and Manager 1.5 Leadership Styles 1.6 Leadership Theories: Trait Theory, Behavioral Theory Situational Theory, Managerial Grid, Fiedler's Contingency Model, Hersey-Blanchard 'S Situational Model, Path-Goal 		12
2	 2. Individual Behavior 2.1 Foundation of Individual Behavior: Individual Differences, factors influencing individual differences and implications of individual behaviors 2.2 Emotional Intelligence 2.3 Personality: Concept, Big-Five personality traits, types of personality, application of personality in organization 2.4 Perception: Concept, Process, attribution theory, Factors Influencing Perceptions, Managerial Implications of perception 2.5 Attitude and Values: concept, components, types of attitudes, types of values 2.6 Motivation: concept, motivation implication on performance and behavior, motivational theories: Maslow's need hierarchy theory, Herzberg's motivational hygiene theory, McClelland's need theory, Alderfer's ERG theory, Vroom's expectancy theory, McGregor theory X and Y, Motivation applications and Implication 	25	12

	3. Group Behavior		
3	 3.1 Group: Concept, types of groups, why people join group, why people form group, development of group, punctuated equilibrium model, group decisions, group decision techniques 3.2 Team: difference between group and team, types of teams, team effectiveness model. 3.3 Organizational conflicts: concept of conflicts, types of conflicts, conflict management resolution techniques 3.4 Transactional Analysis and Johari Window 	25	12
	4. Understanding and Managing Organizational Systems		
4	 4.1 Stress and Stress management: workplace stress Concept, Individual and Organizational stressors, Individual and Organizational Coping Mechanism strategies 4.2 Organizational Culture: Concept of Organizational Culture, Impact of Organizational Culture, Creating Organizational Culture, Socialization Process, 4.3 Change Management: Organizational Change Concepts & Types of Change, Factors in Resistance to Change and Overcoming Resistance to Change and Organizational Development 	25	12
	Total	100	48

- 1 Organizational Behavior 18th Edition Stephen Robbins, Timothy A. Judge, Neharika Vohra
- 2 Organizational Behavior L. M. Prasad (Sultan Chand)
- 3 Introduction to Psychology 5th Edition Baron & Mishra (Pearson.

- a. Course Name: Health Economics for Hospital Management HEHM
- b. Course Code: 19204215
- c. Prerequisite: Basic Knowledge about **Health Economics for Hospital Management**
- d. Rationale: Enable students understand application of health economics and health financing for hospital management.

Unit	Topics	Weightage	Teaching Hrs.
No.		(%)	1113.
	1. Introduction to Health economics		
	1.1. What is HE?	15	4
1	1.2. Concept of equity and equality		
	1.3. Key features and principles of HE		
	1.4. Macroeconomics and microeconomics		
	1.5. Demand vs supply		
	1.6. Need and demand		
	1.3 Health and healthcare market		
	2. Health Financing		
2	2.1. Definition of health financing	25	4.5
2	2.2. Concept of equity and equality	25	15
	2.3. Basics of health insurance		
	2.4. Principles of health insurance		
	2.5. Types of health insurance		
	2.6. Health insurance scenario in India		
	2.7. Risk management and third-party administration		
	3. Basics of Economic Evaluation		
3	3.1. Types of economic evaluation	15	4
	3.2. Overview of decision analytic modelling		
	4. Basics of Accounting & Budgeting		
	4.1. Accounting and budgeting		4.0
4	4.2. Types of costs	20	10
4	4.3. Classification of costs		
	4.4. Cost accounting and cost control		
	4.5. Hospital budgeting		
	5. Market Analysis	25	15
5	5.1. Introduction to market Structure		
	5.2. Perfect Competition		
	5.3. Monopoly, Oligopoly and Pricing		
	Total	100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests (Summative/MCQ/Open book exam) etc.

- 1. Essentials of Health Economics: Diane M. Dewar
- 2. Health Economics for Hospital Management: Dutta Shuvendu Bikash
- 3. Hospital Management (Vol 3): Manisha Saxena 4. Health Economics: Ceri Philips

a. Course Name: **Internship** b. Course Code: 19204216

c. Prerequisite: Basic Knowledge about hospital.

d. Rationale: The purpose of Internship for the student is to gain a sense of health administration and management practices in real world scenarios, enable analytic and problem-solving skills. Students are placed at Government or non-governmental organizations where s/he can use their theoretical knowledge gained in one semester to critically evaluate the existing activities within a program/project they are associated with...

Course Contents

Sr. No.	Description	Weightage (%)	Practice Hrs.
	Internship Orientation: Students are oriented on internship		
	process by Internship Coordinator. Internship coordinator shares internship schedule and monitor internship activities.	10	2
	•		
2	 Develop individual student's profile and CV 	10	8
	Issue internship letter		
3	Internship at host institute	65	242
	Meeting with mentor		
4	Internship report preparation, submission and viva	15	100
	Total	100	352

Continuous Evaluation:

- Internship activities are monitored by assigned mentor and internship coordinator from the institute.
- Internal assessment is based on students' performance during internship, feedback received from supervisor at the host institution and report submitted to Internship coordinator duly signed and approved by Mentor and Internship Coordinator from the Institute.
- External assessment will be based on viva-voce during semester end exam.

k. Reference Materials:

- 1 Format of Internship Report
- 2 Format for Internship letter.

a. Course Name: Research Methodology & Research Ethics

b. Course Code: 19204217

c. Prerequisite: Basic Knowledge about Research Methodology & Research Ethics

d. Rationale: healthcare and hospital settings.

Course Contents

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to Scientific Research 1.1. Characteristics of scientific research 1.2. Types of research 		
	1.3. Understanding and Formulating the Research Process	10	4
	1.4. Choosing research topic		
	1.5. Formulating research questions and hypotheses		
	1.6. Writing Introduction 2. Literature review		
2	2.1. Types of literature review2.2. Literature review process2.3. Critical review of the existing evidence2.4. Methods of synthesizing evidence from literature2.5. Writing literature review	20	10
	3. Study designs		
	3.1. Overview of research designs		
3	3.2. Qualitative research, quantitative and mixed method research		
	Designs	20	10
	3.3. Study variables		10
	3.4. Sampling and sampling techniques		
	3.5. Universe, population, sample size and method of		
	estimating		
	sample size 3.6. Writing study design		
4	4. Data Collection and Data analysis		
	4.1. Overview of data collection procedure		
	4.2. Tool development and use of digital platforms for	25	20
	data collection		
	and use of kobo tool for data collection		
	4.3. verview of data analysis 4.3. Data analysis using excel and SPSS		
5	5. Ethics in Research and Writing		
	5.1. Principles of ethics		
	5.2. Plagiarism	25	20
	5.3. Writing research proposal, and dissertation Total	100	64
	I Viai	100	UH

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 Research Methodology 18th Edition CR Kothari
- 2 Research Design: Qualitative, Quantitative, and Mixed Methods Approaches 5th Edition John W. Creswell and J. David Creswell (Sage)
- 3 Ethics in Public Health Practice in India Arima Mishra, Kalyani Subbiah (Eds.)

(10)

a. Course Name: Control Systems for Hospital Management

b. Course Code: 19204218

c. Prerequisite: Basic about Control Systems for Hospital Management

d. Rationale: Acquaint the student with the systems of management control and performance evaluation

in Healthcare and Hospital setups.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	1. Introduction to Control System for Hospital Management 1.1. Need for management control system 1.2. Understand hospital performance 1.3. Controls in Healthcare 1.3.1. Health care targets 1.3.2. Financing systems 1.3.3. Resource allocation 1.3.4. Health services allocation 1.3.5. Human resource 1.3.6. Technology 1.3.7. Control of Overall Performance 1.3.8. Direct and Preventive Control	20	10
2	2. Structure of Management Control 2.1. Responsibility Centers 2.2. Expense Centers 2.3. Revenue Centers 2.4. Profit Centers 2.5. Investment Centers 2.6. Research and Development Centers 2.7. Transfer Prices, Corporate Services and Administration of Transfer Prices	20	10
3	 3. Management Control Process 3.1. Strategic Planning 3.2. Programming and Budgeting 3.3. Performance Evaluation 3.4. Performance Report Preparation 	25	10
4	 4. Management Control Strategy 4.1. Corporate Strategy 4.1.1 Strategic Management Control 4.1.2 Management Control in Healthcare	35	18
	Total	100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc

- 1 Management Control Systems: Principles and Practices 2nd Edition SC Das (PHI Learning Pvt. Ltd).
- 2 Management Control systems Text and Cases Subhash Sharma (Tata- McGraw-Hill publishing Company, New Delhi)
- 3 Management control Systems Robert Anthony and Vijay Govindarajan (Tata McGrawhill publishing Company, New Delhi)
- 4 Management information and control systems Dr. Sushila Madan (Taxmann Allied Services Pvt. Ltd., New Delhi)

(11)

a. Course Name: Human Resource Management

b. Course Code: 19204219

c. Prerequisite: Knowledge about HRM up to Graduation level.

d. Rationale: Orient and enable students to learn about the Human Resource function relating to the organization of HR Department, recruitment, training and development and managing relations with stakeholders.

Course Contents

Unit No.		Topics	Weightage (%)	Teaching Hrs.
	1.	Nature and Scope of Human Resource Management		
		1.1 Meaning and Definition – Functions – Objectives		
		 Organization of HRM Department 	20	10
1		1.2 Policy Evolution of Personnel / HRM in General and with		
		reference to HR department in hospital.		
	2.	-		
		2.1 Planning – Forecasting and determination of current		
		and Future Human Resource Requirements –	20	10
2		2.2 Job Analysis and Job Design Recruitment - Selection, Orientation and Placement.		
	2	Development of Human Resources		
	٥.	3.1 Employment Training and Management		
3		Development - Motivation – Performance Appraisal,	25	10
		Performance Counseling		
		3.2 Maintenance of Human Resource – Employee		
		Compensation – Job evaluation – Incentive Payments –		
		Promotion and Transfer – Policies – Methods.		
	4.	Industrial Relations		
		4.1 Framework for employer – Employee relations – 4.2 Grievance Procedure – Guidelines for handling	35	18
		grievance	33	10
4		4.3 Work ethics – Work culture and quality of work life.		
	To	otal	100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 Hospital Administration and Human Resource Management. Goyal. R.C., PHI Private Limited, New Delhi.
- 2 Human Resource Management. David A.De Cenzo & Stephen P. Robbins. Prentice Hall of India Private Limited.
- 3 Principles of Personal Management. Flippo, Edwin B. International Students Edition McGraw Hill Book Company.
- 4 Managing Human Resource. Arun Monappa Tata McGraw Hill Publishing Company.

(12)

a. Course Name: Operations Research

b. Course Code: 19204220

c. Prerequisite: Basic Knowledge up to graduation level.

d. Rationale: Make students familiar with principles and techniques of Operations Research and their

applications in decision-making.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
	 Introduction to Operations Research (OR) 1.1. Definition, Importance and Scope of Operations Research 		
1	(OR)		
_	1.2. Characteristics of OR		
	1.3. Need of OR		
	1.4. OR and Decision making		
	1.5. Objectives of OR		
	1.6. Phases and Models in OR	25	12
	1.7. Areas of applications of OR		
	1.4.1. Patient scheduling		
	1.4.2. Patient waiting		
	1.4.3. Equipment replacement		
	1.4.4. Resource allocation		
	1.8. Strengths and limitations of OR		
	2. Methods of Operations Research		
2	Z		
	2.1. The methodology of quantitative approach –		
	Determining the nature of the problem		
	2.2. Classification of problem – Formulation of		
	mathematical model – Solution – implementation.		
	2.3. Decision theory – Decision making under conditions of		
	uncertainly – Conditions of risk – The value of perfect	25	12
	information		
	 decision trees – Decision making under conditions of certainly. 		
	2.4. Linear Programming		
	2.5. Non-Linear Programming		
	2.6. Transportation Model		
	2.7. Assignment Model		
	2.8. Sequencing Model		
	2.9. Dynamic Programming		

	3. Decision theory, games and investment analysis		
	3.1 Overview of decision theory		
3	3.2 Steps in decision theory approach		
	3.3 The theory of games		
	3.4 Characteristics of game		
	3.5 Game models and rules of game theory		
	3.6 Introduction to Investment Analysis		
	3.7 Methods of investment analysis	30	15
	3.8 Break-even analysis		
	3.9 Payback period		
	3.10 Average rate of return method		
	3.11 Time-adjusted or discounted cash flow method		
	3.12 Internal rate of return method		
	4. Network analysis in Project planning		
	4.1. Introduction to project planning		
1	4.2. Project planning, scheduling, controlling	20	09
	4.3. Objectives of network analysis		
	4.4. PERT and CPM		
	Total	100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 Operations Research. Prem Kumar Gupta and DS Hira S. Chand, New Delhi
- 2 Operations Research: Theory and Applications. 6th Edition. JK Sharma Trinity Press
- 3 Operations Research: An Introduction. 10th Edition. Hamdy Taha Person.

(13)

- a. Course Name: Operations Planning and Finance Management
- b. Course Code: 19204221
- c. Prerequisite: Basic Knowledge up to graduation level.
- d. Rationale: The hospital as an industry to deal with health and diseases. Effective operations planning and finance management is crucial for smooth functioning of the healthcare organization/hospital. This course will expose students with hospital operations, planning and finance management.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Operations management Introduction Operations strategies Operations planning Front Office: Admission – Billing – Medical Records – Death in Hospital, Brough Dead in	15	10
2	Equipment, calibration of hospital equipments 2. Patient care and support services 2.1. Patient Care & Support services management: Clinical Services, Clinical Departments, Outpatient department (OPD), Types of patients in OPD, Flow pattern of patients; Radiology, X-Ray rooms, Types of X-Ray machines, Staff, USG, CT, MRI, and ECG. 2.2. Medical audit and medical record management	20	15
3	3. Support and Utility Services 3.1 Diagnostic-Radiology & Imaging Services, Hospital Laboratory etc, 3.2 Blood Bank & Transfusion Services, Ambulance Services, Pharmacy, Oxygen Manifold/Concentrator, Dietary Service, Medical Social Worker, Marketing and Public Relations, Finance and Administrative Departments, and Outsourcing. 3.3 House Keeping –Linen and Laundry, - Food Services - Central Sterile Supply Department (CSSD) 3.4 Biomedical Waste Management and Hazards in Hospital 3.4.1 Definition of Biomedical Waste, Segregation, collection, transportation, disposal, Liquid BMW, Radioactive waste, Metals / Chemicals / Drug waste, BMW Management & methods of disinfection 3.4.2 Modern technology for handling BMW, Monitoring & controlling of cross infection (Protective devices), 3.4.3 BMW from Administrative point (Budget, Health check-up, Insurance)	15	10

4	4.	Purchase and Inventory Management 4.1 Purchase management: Purchasing strategy process, organizing the purchasing function, financial aspects of purchasing, tactical and operational applications in purchasing management 4.2 Inventory Management: Overview of inventory,	15	10
	_	valuation and accounting for inventory – physical location and control of inventory – planning and replenishment concepts – protecting inventory		
5	5.	 Finance Management 5.1 Nature, Scope and Objectives of Financial Management 5.2 Goals of FM-Profit Maximization Vs Wealth Maximization 5.3 Finance Functions, Financial Planning and Forecasting 5.4 Role of Financial Manager 5.5 Investment decisions: Investment decision process-Project generation, project evaluation, project selection and project implementation. Developing Cash Flow; Data for New Projects; Evaluation Techniques – Traditional and DCF methods. The NPV vs. IRR Debate; Approaches for reconciliation. Capital budgeting decision under conditions of risk and uncertainty. 5.6 The Financing Decision: Sources of finance – a brief survey of financial instruments; Capital Structure Theories, Concept and financial effects of leverage; The capital structure decision in practice: EBIT – EPS analysis. Cost of Capital: The concept – Average vs. Marginal Cost 	35	35
		vs. Marginar Gost	100	80

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 Operations Management. 12th Edition. Jay Heizer, Barry Render, Chuck Munson and Amit Sachan Pearson
- 2 Essentials for hospital support services and physical infrastructure. Madhuri Sharma Jaypee Brothers Publications
- 3 Principles of hospitals administration and planning. Sakharkar BM Jaypee Brothers publications
- 4 Management Accounting Paresh Shah Oxford Publications
- 5 Financial Management Khan & Jain
- 6 Fundamentals of Financial Management. Van Horne & Wachowiz Prentice Hall India
- 7 Fundamentals of Financial Management Sheeba Kapil Pearson Publicatio

a. Course Name: Soft Skills for Hospital Administrators

b. Course Code: 19204222

c. Prerequisite: Basic about soft skills required in management and society.

d. Rationale: The hospital is service industry where team need to interact and deal with patients and stakeholders directly on daily basis. Effective soft skills are essential for maintaining and enhancing patients/stakeholders' experiences of availing services or providing services to the hospital. This course will enable students to recognize and utilize essential soft skills.

CLO 5	Use lay counselling as an effective tool for fostering	6
	positive mental health of healthcare providers	

Uni t	Topics	Weightage (%)	Teaching Hrs.
No.	4. Introduction of accountial skills for		
	1. Introduction of essential skills for		
	healthcare professionals 1.1. Technical skills		
1	1.2. Conceptual skills	10	2
1	1.3. Human skills	10	2
	1.4. Workplace etiquettes and Professional conduct		
	2. Managerial communication		
	2.1. Basic concepts & principles of good communication		
	2.2. Special characteristics of communication in health		
2	2.3. Process of managerial communication		
_	2.4. Barriers of communication & how to overcome	30	4
	2.5. Communication with the media / press	30	1
	2.6. Managerial writing (report, press release, email,		
	memo, etc.)		
	2.7. Interview, Group meeting		
	3. Time management3.1. Benefits of Time management.		
	3.2. Parkinson's Law.		
3	3.3. Pareto Principle and ABCDE Method of Prioritizing.	20	4
	3.4. Time Management tips to increase productivity.		
	4. Interpersonal Management		
4	4.1. Team management	10	2
1	4.2. Negotiation	10	2
	4.3. Goal setting		
	5. Behaviour Change Communication and Lay Counselling		
	5.1. Behaviour Change Communication		
5	5.2. Understand Lay counselling		
	5.3. Counselling Process	30	4
	5.4. Counselling Skills	50	г
	5.5. Workplace mental health		
	5.6. Common mental health consequences at workplace 5.7. Wellbeing programmes at workplace		
	5.7. Wendering programmes at workplace	100	16
		100	10

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 Business and Professional Communication Kelly M. Quintanilla & Shawn T. Wahl, Sage Publications
- 2 Life skills for success. Alka Wadkar Sage Publication.
- 3 Managerial Communication.4th Edition, Geraldine E. Hynes, Mc Grow Hill (Indian Edition)
- 4 Mental Health and Lay Counselling, Module 6. Certificate Course in Community Health Indian Institute of Public Health Gandhinagar

a. Course Name: Logistics & Supply Chain Management

b. Course Code: 19204223

c. Prerequisite: Basic knowledge about Logistics & Supply Chain Management

d. Rationale: The hospital industry requires logistics and supply chain management. This course

will introduce students with basic concepts and process of Logistics and Supply Chain

Management.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to Logistics 1.1. Definition of Logistics Management 1.2. Logistics Role in the Firm 1.3. Development of Logistics Management 1.4. Challenges in LM 	10	4
2	 2. Introduction to Supply Chain Management 2.1. Definition of Supply Chain Management 2.2. Approaches and Processes of supply chain drivers and obstacles. 2.3. SC strategies 2.4. Demand forecasting 2.5. Aggregate planning 2.6. Managing predictable variability 2.7. Material management: importance of material 	20	8
	management, material management cycle, Principles & economics of material management, Quality Assurance of materials, utilization indices 3. Inventory management		
3	3.1. Inventory planning 3.2. Factors affecting inventory approaches 3.3. Methods to manage inventory and prevent stock out situations. 3.4. Purchase & procurement system – objectives, guidelines, Types of purchase system, steps in purchase & procurement, RFPs, tender, technical & financial bidding, evaluation of proposals, Letter of credit, Import formalities 3.5. Equipment maintenance – down time, types of maintenance, service contracts, Condemnation and Disposal.	20	8

4	 4. Logistics Management 4.1. The Integrated Logistics Management 4.2. Logistics and the Marketing function 4.3. Logistics and corporate Profit performance - the financial Impact of Logistics Decision - Conducting a Logistics and Marketing audit 4.4. Developing a Logistics Strategy 4.5. Sourcing and Logistics 4.6. Purchasing & Sourcing Decisions 4.7. Transportation 4.8. Logistics, Warehousing, Containerization, and packaging 	30	20
5	 5. Designing Supply Chain Network 5.1. Distribution network 5.2. Performance management and control 5.3. Benchmarking 5.4. Gap analysis and balance score card 5.5. Supply chain integration, Push, pull, and push-pull systems, Demand-driven strategies, Supply Chain IT Innovations 	20	8
		100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 SCM-Strategy, Planning & Operation. Sunil Chopra and Peter M –PHI
- 2 Essentials of SCM. Mohanty RP, & Deshmukh SG, -Jaico
- 3 Principles of Hospital Administration by S. A. Tabish Jaypee Brothers Publishers
- 4 Hospital Stores Management: An Integrated Approach. Shakthi Gupta – Jaypee Brothers Medical Publishers Ltd
- 5 Materials Management. Gopala Krishnan
- 6 Inventory Control. A. C. Dut

(16)

a. Course Name: Hospital Marketing and Health Promotion

b. Course Code: 19204224

c. Prerequisite: Basic about Marketing and its importance

d. Rationale: In today's competitive era with larger share of private sector in healthcare industry, hospital and healthcare organizations require effective marketing and approaches to promote health. This course will introduce students with basic concepts and process of hospital marketing and health promotion.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	1. Introduction to Marketing 1.1. Concept 1.2. Marketing management 1.3. Marketing segmentation in hospital 1.4. Market analysis 1.4.1. Health care needs 1.4.2. Factors influencing patient behaviour 1.4.3. Chief determining variables 1.5. Targeting and product positioning for health care services	10	4
2	 Marketing strategies 2.1. Marketing mix strategies 2.2. Product item, product line and product mix decisions 2.3. Managing product item, product line and product mix decisions 2.4. Process of new Product Development 2.5. Product life cycle strategies 2.6. Pricing strategies 2.7. Channel management in Hospitals 2.8. Internal marketing 2.8.1 Importance and objectives of internal marketing 2.8.2 Internal marketing strategies 2.8.3 Promotional campaign design 2.8.4 Interactive marketing 2.9. Advertising and publicity 2.9.1 Types 2.9.2 Levels of advertising 2.9.3 Advertising expenditure 2.9.4 Advertising decisions 2.9.5 Publicity 	30	20
3	 3. Digital marketing in healthcare 3.1 Digital marketing 3.2 Digital marketing strategies 3.3 SWOT analysis of digital marketing 	20	8

	4. Market research and information		
	4.1. Market information		
4	4.1.1 Market decision support systems	20	8
	4.1.2 Demand forecasting		
	4.1.3 Ethical marketing practices		
	4.2. Market information system		
	4.2.1 Marketing channel		
	4.2.2 Physical distribution		
	4.2.3 Channel design		
	5 Health Promotion in Healthcare		
	5.2 Definition of Health Promotion		
5	5.3 Health promotion theories	20	8
	5.4 Develop Health promotion strategies	20	U
	5.5 Designing, planning, implementing, and		
	evaluating health promotion strategies		
		100	48

- 1 Marketing Management (Millennium Edition). Kotler Philip Prentice- Hall India, New Delhi.
- 2 Services Marketing (The Indian context). Srinivasan.R. Prentice- Hall India, New Delhi.
- 3 Services Marketing (Indian Perspective). Ravi Shankar. Excel Books New Delhi.
- 4 Marketing Management. Saxena, Rajan. Tata McGraw Hill, new Delhi.

- a. Course Name: Quality Management and Accreditation of Hospitals
- b. Course Code: **19204225**
- c. Prerequisite: Basic about Quality in system and its importance
- d. Rationale: The quality of care is at the heart of the healthcare services. It is mandated to maintain minimum standard and quality of care. This course will expose students with quality management approaches and accreditation process.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
	1. Introduction to Quality Management in Healthcare		
	services		
	1.1. Quality – Service Quality – Quality and productivity		
1	- Quality costs in service organizations		
	1.2. Quality management philosophies – Contributions of	20	12
	Deming, Jurran and Crosly	20	12
	1.3. Planning for quality – Creating quality culture		
	 patient centered quality – Training for 		
	quality		
	1.4. Quality management in Hospital Department – Front		
	office, OPD, Casualty, Laboratory, OT, ICU, MRD,		
	Dietary, Laundry, Housekeeping, CSSD, IP and		
	Nursing		
	1.5. Patient safety management – Hospital acquired		
	infection		
	control – equipment maintenance		
	2. Quality Assessment		
	2.1. Assessing quality		
2	2.2. Patient satisfaction survey – medical audit,	20	12
	Clinical audit Nursing audit 2.3. Standard Operating Procedures for Hospitals		
	3. Total Quality Management		
	3.1. TQM		
	3.1.1. Concept		
	3.1.2. Team work / Employee involvement		
3	3.1.3. Key result areas 3.2. TQM tools	30	21
	3.2.1. Quality function Deployment (QFD)		
	3.2.2. Concurrent Engineering		
	3.2.3. FMEA		
	3.2.4. Deming's P- C- D- A- Cycle		
	3.2.5. JIT		
	3.2.6. Kaizen 3.2.7. Zero defect program		
	3.3. Statistical tools in TQM		
	3.3.1. Flow diagram		
	3.3.2. Pareto Analysis		
	3.3.3. Cause and effect diagram		
	3.3.4. Control charts		

4	4. Systems approach to Quality 4.1. Introduction to ISO 2000, ISO 14000, and ISO 18000 4.2. Documentation of quality systems and manuals 4.3. Accreditation – 4.3.1. Quality Improvements and parameters 4.3.2. NABH, JCI, NABL guidelines 4.4. Bench marking 4.4.1. Definition, methodology and design, evaluation and analysis 4.4.2. Business Process Reengineering	30	19
		100	64

- 1 Total Quality Management. 3rd Edition. Poornima M. Charatimath. Pearson.
- 2 Principles of Hospitals Administration and Planning. Sakharkar BM Jaypee Brothers publications. Hospital and Healthcare Accreditation. Brajkishore Rajoriya Jaypee Brothers publications
- 1 Standard Operating Procedures for Hospital in India. Arun K Agarwal Atlantic.

- a. Course Name: Health Insurance and Medical Tourism
- b. Course Code: 19204226
- c. Prerequisite: Basic knowledge about insurance and Medical Tourism
- d. Rationale: The rapid growth of the health insurance and medical tourism industry has created a great demand for professionals who are trained in health insurance and medical tourism. Most hospitals now have dedicated teams who work with different health insurance companies and international medical tourism companies to attract more and more international patients. This course will enable students to understand health insurance and medical tourism.

1. Introduction Health Insurance and Medical Tourism 1.1. Concepts of insurance (life, and nonlife). 1.2. Types of Health Insurance 1.3. Private and Government Health Insurance Schemes (State & Central Level) 1.4. Scope of Health Insurance and Medical Tourism 1.5. Current trends in Health Insurance - International and Indian scenario. 1. Managerial communication 2.1. Basic concepts & principles of good communication 2.2. Special characteristics of communication in health 2.3. Process of managerial communication in health 2.4. Barriers of communication & how to overcome 2.5. Communication with the media / press 2.6. Managerial writing (report, press release, email, memo, etc.) 2.7. Interview, Group meeting 3. Time management 3.1. Benefits of Time management. 3.2. Parkinson's Law. 3.3. Pareto Principle and ABCDE Method of Prioritizing. 3.4. Time Management tips to increase productivity. 4. Medical Tourism 4.1. Concept of medical tourism 4.2. Need for medical tourism 4.3. Competitive advantage, 4.4. Global Scenario and trends in medical tourism 4.5. Challenges in Medical tourism 4.6. Role of marketing in medical tourism. 5. Behaviour Change Communication and Lay Counselling 5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Skills 5.5. Common mental health consequences at workplace 5.6. Wellbeing programmes at workplace	Unit No.	Topics	Weightage (%)	Teaching Hrs.
2.1. Basic concepts & principles of good communication 2.2. Special characteristics of communication in health 2.3. Process of managerial communication 2.4. Barriers of communication & how to overcome 2.5. Communication with the media / press 2.6. Managerial writing (report, press release, email, memo, etc.) 2.7. Interview, Group meeting 3. Time management 3.1. Benefits of Time management. 3.2. Parkinson's Law. 3.3. Pareto Principle and ABCDE Method of Prioritizing. 3.4. Time Management tips to increase productivity. 4. Medical Tourism 4.1. Concept of medical tourism 4.2. Need for medical tourism 4.3. Competitive advantage, 4.4. Global Scenario and trends in medical tourism 4.5. Challenges in Medical tourism 4.6. Role of marketing in medical tourism. 5. Behaviour Change Communication and Lay Counselling 5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Process 5.4. Counselling Skills 5.5. Common mental health consequences at workplace 5.6. Wellbeing programmes at workplace	1	 1.1. Concepts of insurance (life, and nonlife). 1.2. Types of Health Insurance 1.3. Private and Government Health Insurance Schemes (State & Central Level) 1.4. Scope of Health Insurance and Medical Tourism 1.5. Current trends in Health Insurance - International 	10	5
3.1. Benefits of Time management. 3.2. Parkinson's Law. 3.3. Pareto Principle and ABCDE Method of Prioritizing. 3.4. Time Management tips to increase productivity. 4. Medical Tourism 4.1. Concept of medical tourism 4.2. Need for medical tourism 4.3. Competitive advantage, 4.4. Global Scenario and trends in medical tourism 4.5. Challenges in Medical tourism 4.6. Role of marketing in medical tourism. 5. Behaviour Change Communication and Lay Counselling 5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Process 5.4. Counselling Skills 5.5. Common mental health consequences at workplace 5.6. Wellbeing programmes at workplace	2	 2.1. Basic concepts & principles of good communication 2.2. Special characteristics of communication in health 2.3. Process of managerial communication 2.4. Barriers of communication & how to overcome 2.5. Communication with the media / press 2.6. Managerial writing (report, press release, email, memo, etc.) 	30	14
4.1. Concept of medical tourism 4.2. Need for medical tourism 4.3. Competitive advantage, 4.4. Global Scenario and trends in medical tourism 4.5. Challenges in Medical tourism 4.6. Role of marketing in medical tourism. 5. Behaviour Change Communication and Lay Counselling 5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Process 5.4. Counselling Skills 5.5. Common mental health consequences at workplace 5.6. Wellbeing programmes at workplace	3	3.1. Benefits of Time management.3.2. Parkinson's Law.3.3. Pareto Principle and ABCDE Method of Prioritizing.	20	10
5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Process 5.4. Counselling Skills 5.5. Common mental health consequences at workplace 5.6. Wellbeing programmes at workplace	4	 4.1. Concept of medical tourism 4.2. Need for medical tourism 4.3. Competitive advantage, 4.4. Global Scenario and trends in medical tourism 4.5. Challenges in Medical tourism 4.6. Role of marketing in medical tourism. 	10	5
	5	5.1. Behaviour Change Communication 5.2. Understand Lay counselling 5.3. Counselling Process 5.4. Counselling Skills 5.5. Common mental health consequences at workplace	30 100	14 48

- 1 Business and Professional Communication Kelly M. Quintanilla & Shawn T. Wahl, Sage Publications
- 2 Life skills for success. Alka Wadkar Sage Publication.
- 3 Managerial Communication.4th Edition, Geraldine E. Hynes, Mc Grow Hill (Indian Edition)
- 4 Mental Health and Lay Counselling, Module 6. Certificate Course in Community Health Indian Institute of Public Health Gandhinagar

a. Course Name: Hospital Development and Infrastructure Planning

b. Course Code: **19204227**

c. Prerequisite: Basic of Hospital Development

d. Rationale: This course will enable students to learn hospital development and infrastructure

planning.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
_	1. Hospital Planning and Design		
	1.1. Concept of hospital		
	1.2. History of hospital development- Department		
1	and organization structure of different types of	30	14
	hospital	30	- 1
	1.3. Planning and design of hospital (building and		
	physical layout)		
	1.4. Space required for separate function		
	1.5. Problems and constraints in different type of hospitals		
	2. Hospital Architecture and Infrastructure Development		
	2.1. Concept of infrastructure		
	2.2. Principles for Infrastructure Development		
2	2.3. Departmentation in hospital		
	2.4. Structure – Vertical & Horizontal – Clinical & Non	30	14
	clinical – supportive & ancillary service	50	- 1
	departments		
	2.5. Green building concept		
	2.6. Hospitals architecture and design in India2.1. World's most impressive hospital architecture		
	3. Project management		
	3.1. Concept of project management		
2	3.2. Categories of projects		
3	3.3. Projects life cycle phase		
	3.4. Tools and techniques for project management.	20	10
	3.5. Project implementation stages: direction –	20	10
	communication in a projects – coordination		
	guidelines for effective implementation reporting		
	in project management – project evaluation and its		
	objectives types and methods.		
	4. Human centered design 4.1 Concept of human centered design (HCD)		
4	4.1. Concept of human centered design (HCD) 4.2. Key characteristics of HCD		
	4.3. Organizing system and procedures: working of		4.5
	system – design of system – project work system	20	10
	design – work break down structure – project		
	execution plan – project procedure manual project		
	control system – planning scheduling and		
	monitoring – monitoring contracts and project diary.		
	Total	100	48

- 1 Healthcare Architecture as Infrastructure: Open Building in Practice. Edited By Stephen H. Kendall
- 2 Essentials for Hospital Support Services and Physical infrastructure. Madhuri Sharma
- 3 Public Health Infrastructure in Transition. P Sigamani

(20)

a. Course Name: Risk Planning and Disaster Management

b. Course Code: 19204228

c. Prerequisite: Basic about Disaster Management

d. Rationale: This course will enable students to learn risk planning and disaster management.

Course Contents

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to Risk Planning and Disaster Management 1.1. Concept and Definition 2. Occupational hazards, disaster and emergencies 3. Safety in hospitals: General safety, Fire safety,	30	14
2	2.1. Definition 2.2. Types of disaster 2.3. Components of disaster plan 2.4. Pre-hospital & hospital 2.5. Disaster preparedness 2.6. Disaster plan formulation & implementation	30	14
3	3. Occupational Risk Planning and Management 3.1. Definition 3.2. Ergonomics and its application in hospitals 3.3. Occupational hazards 3.4. Workman Compensation Act 3.5. Grievance redressal and settlement of disputes 3.6. Wage fixation & collective bargaining	20	10
4	 4. Psychosocial Care and Mental Health Services during Disaster 4.1. Concept of psychosocial care and mental health 4.2. Types of psychosocial care services 4.3. Psychological First-aid 4.4. Psychosocial Counselling 4.5. Crisis Counselling 4.6. Structures Activities for Psychosocial Care 4.7. Referral management for specialized mental health services 	20	10
	Total	100	48

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/MCQ/Open book exam) etc.

- 1 An Introduction to Disaster Management: Natural Disasters and Man Made Hazards 2020. S Vaidyanathan CRS Publications
- 2 Disaster Management for Health Care Professionals. Joshi Sonopant Jaypee
- 3 Hospital Hazards: A Former RN's Guide to Get Out Alive TigerLily
- 4 National Disaster Management Guideline Hospital Safety. Government of India
- 5 National Disaster Management Guideline Psychosocial Care and Mental Health Services. Government of India

(21)

a. Course Name: Legal and Ethical Issues in Hospital Administration

b. Course Code: 19204229

c. Prerequisite: Understand about legal and ethical issue

d. Rationale: This course will enable students to learn legal and ethical issues related to hospital

administration.

Course Contents

Unit No.	Topics	Weightage (%)	Teaching Hrs.
	 Introduction to legal and ethical issues 1.1. Concept and Definition 1.2. Broad introduction to medical jurisprudence 		
1	and its application in hospitals 1.3. Code of medical ethics 1.4. Hippocrates oath and declaration of Geneva	50	16
	1.5. Introduction to Legal framework 1.5.1. Patient's rights & provider's responsibility 1.5.2. Medical Malpractice of Medical Malpractice		
	2. Medico-legal issues 2.1. Definition		
	2.2. Types of medico-legal issues	20	6
2	2.3. Role of administrator in preventing and		Ü
	managing medico-legal cases 2.4. Case studies on medico-legal issues		
3	3.1. Difference between laws, acts and policies 3.2. Different Laws & Acts applicable to hospitals: 3.2.1. Drug & Cosmetic Act 3.2.2. Organ Transplantation Act 3.2.3. Medical Termination of Pregnancy Act 3.2.4. Prenatal Diagnostics Act 3.2.5. ESI Act 3.2.6. Clinical Establishment Act 3.2.7. Laws Relating to toxicology 3.2.8. Consumer Protection Act and its application in hospitals 3.2.9. Law of Tort	30	10
	3.2.10. Other relevant Laws and Acts Total	100	32

Continuous Evaluation: It consists of Assignments/ Seminars/ Presentations/ Quizzes/ Surprise Tests/ Tests (Summative/ MCQ/ Open book exam) etc.

- 1 Health Law And Ethics Critical Reflections. Nandimath Omprakash V. Alexander Thomas, Arpitha H.C. Thomson Reuters
- 2 Doctor & Laws, Singhal
- 3 Forensic Medicine and Toxicology. Dr.V.V. Pillay
- 4 Organ Transplantation Act Bare Act. Supreme Court of India
- 5 Code of Ethics Regulations, 2002. Medical Council of India.

Semester: 3 - Elective Subject (i)

a. Course Name: Digital Health and Health Informatics

b. Course Code: **19204230**

c. Prerequisite: Importance and basic about Digital Health d. Rationale: This course will enable students to learn digital tools in healthcare settings.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to Digital Health and Health Informatics 1.1. Definition of digital health, eHealth, health technology, medical informatics and health informatics 1.2. Types of health technologies 1.3. Principles of health informatics 1.4. Applications of health technologies in hospital 1.5. Use of data, information and knowledge for effective healthcare services and better health 1.6. Digitalization of hospital 1.7. Computer applications for hospital administrators – Word Document, Power-point presentation, Excel, software for basic analysis 	30	14
2	and reporting 2. Health Information at Hospital 2.1. Definition 2.2. Health Information Management System 2.3. Health information system & Hospital information system 2.4. Clinical Decision Support System, Decision Support Software 2.5. Clinical Information System and Telemedicine 2.6. Management information system (MIS) 2.7. MIS as a tool to managerial control 2.8. Practical application of HMIS software	30	14
3	 3. Shared care & Electronic Health Records 3.1. Concept of shared care 3.2. Electronic health records (EHR) 3.3. Implications of HER 	20	10
	 4. Patient Safety and Clinical Risks 4.1. Patient Safety 4.2. Clinical risks 4.3. Strategies to prevent and address patient safety 4.4. Ethical-legal issues related to digital health 4.5. Ethical-legal issues pertaining to healthcare information in contemporary clinical practice 4.6. Examples of ethical-legal issues in Indian/Global context 	20	10
	Total	100	48

- 1 Management Information Systems-Conceptual Foundations, Structure and Development. Davis, G.B. and M.H.Oslon –TMH.
- 2 Effective systems design and requirements analysis. Mudford, Eric Mc Graw Hill.
- 3 Managing a Modem Hospital, Chapters 10 and II. A. V. Srinivasan Response Books, New Delhi.
- 4 Introduction to Healthcare Informatics, 2nd Edition, Biedermann, Dolezel AHIMA Press.

Semester: 3 - Elective Subject (ii)

a. Course Name: Entrepreneurship in Healthcare Sector

b. Course Code: 19204231

c. Prerequisite: Importance and benefits of Entrepreneurship

d. Rationale: Some of the key socioeconomic issues of our day include providing basic health care services for all and continuing to increase the quality and prolonged quality of life years of life in an affordable manner. Addressing these difficulties would necessitate innovation and entrepreneurship in both medical technology and health-care delivery. This course will teach the fundamental principles of innovation and entrepreneurship, as well as highlight their importance in the continuous improvement of healthcare and population health. It will also teach students how to identify a problem using evidence and propose an inventive solution while taking into account current infrastructure and networks.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to entrepreneurship in healthcare 1.1. Why Health Care Entrepreneurship? 1.2. Healthcare market and scope of entrepreneurship 1.3. Social entrepreneurship 1.4. A Health Care Venture Story I 1.5. Trends in Health Services Innovation 1.6. Innovation in the Biopharma and Medical	20	10
2	 2. Idea generation and proof of concept 2.1. Idea generation 2.2. Opportunity Identification and Innovation Development 2.3. Evaluating HC Venture Ideas 2.4. Pushing the Innovation Forward 2.5. Pitch preparation 2.6. Validation and proof of concept 2.7. Case studies on medico-legal issues 2.8. "Elevator" Pitches of Promising Opportunities 2.9. Submission of business pitch and proposal 	50	24
3	3. Start-up success and failures 3.1. Healthcare start-up in India 3.2. Start-up eco-system 3.3. Start-up strategy 3.4. Health Care Marketing to Drive 3.5. Financing start-ups 3.6. IP and Barriers to Entry 3.7. Growth and Exit 3.8. Case studies of healthcare start-ups	30	14
	Total	100	48

- 1 Managing Innovation in Healthcare. Barlow J. –World Scientific Publishing Europe Limited
- 2 Innovation and Entrepreneurship in the Healthcare Sector: From Idea to Funding to Launch. 1st ed. Pareras LG. Greenbranch Publishing, LLC
- 3 Introduction to Social Entrepreneurship. Chahine T. –Taylor & Francis Group, LLC
- 4 Collective Genius: The Art and Practice of Leading Innovation. Hill LA. Harvard Business Review Pres

Semester: 3 - Elective Subject (iii)

a. Course Name: Leadership in Healthcare

b. Course Code: 19204232

c. Prerequisite: Importance of Leadership

d. Rationale: Strong leadership is the foundation of the success of any organization. This course will introduce students to the fundamental skills, theories, and practices of leadership in Indian healthcare organization. The course also focuses on the personal development of students as future healthcare leaders. The emphasis is placed in this course that healthcare leadership is a long-term, continuous, intentionally-focused effort and not just a series of short-term, single issue, limited endeavors put together to deal with short- term transient events or projects.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	 Introduction to leadership in healthcare 1.1. Leadership thought 1.2. McCraven Speech: https://youtu.be/pxBQLFLei70 - 1.3. Today's Health Leadership Challenges 1.4. Leadership Competence I: Professional	20	10
2	2. Leadership Assessment and Research: Individual, Team, and Organization 2.1. Leadership assessment 2.2. Determining your own leadership style 2.3. Leadership models 2.4. Leading nonperforming employees 2.5. Responsibilities of mentorship and succession planning 2.6. Leadership challenges 2.7. Measuring the outcomes of leadership initiatives	30	14
3	3. Change management 3.1. Change 3.2. Adopting change 3.3. ADKAR model for change management 3.4. Strategies for change management 3.5. Creating a Knowledge Culture 3.6. The 4 Ps of Health Analytics Adoption	30	14
	4. Ethics in Health Leadership4.1. Principles of ethical leadership4.2. Skills to improve ethical leadership	20	10
	Total	100	48

- 1 Exceptional Leadership: 16 Critical Competencies for Healthcare Executives. 2nd Edition. Carson Dye & Andrew Garman
- 2 Blind spots: Why we fail to do what's right and what to do about it. Bazerman, M. H., & Tenbrunsel, A. E. –Princeton University Press.
- 3 Seven Habits of Highly Effective People. Covey, S. Free Press.
- 4 Meeting the ethical challenges of leadership. JC Lattès. Johnson, C. E. Sage.
- 5 The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations. 5th Ed. Kouses, J. and Pozner, B. –Jossey-Bass.
- 6 Strengths based leadership. Rath, T., & Conchie, B. Gallup Press.
- 7 Learning Questionnaire: http://vark-learn.com/wpcontent/uploads/2014/08/TheVARK-Questionnaire.pdf
- 8 Personality Questionnaire: https://www.surveymonkey.co m/r/J3M7PVP
- 9 Leadership Self-Assessment: https://cf.ltkcdn.net/business/files/3084-leadership-selfassessment.pdf

Semester: 4

a. Course Name: Scientific Writing

b. Course Code: 19204233

c. Prerequisite: Basic about Scientific writing

d. Rationale: Effective writing is considered essential skills. Communicating work and evidence to the management, stakeholders and scientific community is the responsibility of healthcare professionals including hospital managers and administrators. This course will introduce students to the fundamentals of academic and professional writing skills. The course also focuses on the different types of writing with greater emphasis on project report, grant, dissertation and manuscript writing and other scientific writing.

Unit No.	Topics	Weightage (%)	Teaching Hrs.
1	1. Introduction to Scientific Writing 1.1. Meaning of scientific writing 1.2. Key principles of effective writing 1.3. Types of academic and professional writing 1.3.1. Project report 1.3.2. Study report 1.3.3. Proposal / Protocol Writing 1.3.4. Grant Application 1.3.5. Statement of Purpose/Letter of Recommendations 1.3.6. Dissertation/Thesis 1.3.7. Manuscript 1.3.8. Book/Edited book/Monograph	15	02
2	2.1. Structure of writing: Introduction, Method, Results and Discussion 2.2. The Argument matrix 2.3. Framing statement, grammar, punctuation, active voice and logical flow 2.4. Designing effective tables and graphs 2.5. Use of referencing style 2.6. Use of reference manager softwares like Mendeley Zotero, EndNote 2.7. Online writing tools 2.8. Choosing the right journal for publication 2.9. Submission of manuscript	30	05
3	 3. Peer Review, and copy editing 3.1. Proof-reading 3.2. Use of softwares for proof-rea 3.3. Peer review process 3.4. Copy editing process 3.5. Responding to peer-review 	30	05
4	 4. Publication Ethics 4.1. Data sharing policy 4.2. Plagiarism 4.3. Strategies to prevent plagiarism 	25	04
	Total	100	16

- 1 Writing and Publishing a Scientific Research Paper 2021. Parija, Subhash Chandra and Vikram Kate. Springer
- 2 How to Write the Thesis and Thesis Protocol: A Primer for Medical, Dental, and Nursing Courses. Piyush Gupta and Dheeraj Shah. Jaypee Brothers Medical Publishers (P) Ltd.
- 3 Writing That Works, 3rd Edition: How to Communicate Effectively in Business. Kenneth Roman, Joel Raphaelson – Collins Reference
- 4 The art and science of writing a scientific paper. Devendra Mishra and Dheeraj Shah. CBS Publishers.
- 5 Scientific Thesis Writing and Paper Presentation. N Gurumani. Mjp Publishers

Semester: 4

a. Course Name: **Dissertation** b. Course Code: **19204234**

c. Prerequisite: Basic and all knowledge about Hospital.

d. Rationale: The purpose of Dissertation for the student would be to carry out a research or project activity and to test the skills he/she has gained over the past three semesters. The students may associate themselves with some Government or Non-Government Organization or can also carry out the research/project independently using the theoretical knowledge and skills they have gained.

Description:

The dissertation will be issue-based study carried out in clinical/support service/utility areas of any hospital or healthcare setting or public health in any of the following areas:

- Planning & designing of various hospital services
- Patient scheduling & facility streamlining by application of quantitative methods
- Human resource planning
- · Quality of patient service
- · Employee benefit
- Psychological or behavioral issues i.e. Patient satisfaction
- Health insurance/PMJAY
- Health Informatics/Health Technology
- · Administrative issues
- Bio medical waste management
- Stores management & Marketing related studies
- Disaster management & occupational hazard studies
- Epidemiological studies so on & so forth....

Unit No.	Topics	Weightage (%)	Practice Hrs.
1	Research/Project Proposal submission		
	Presentation of Research/Project proposal	20	100
	Approval from dissertation review committee		
2	Conduction of research/project work		
	 Monthly meeting with their respective guide and supervisor at host institute 	30	300
3	Submission of hard copies of dissertations (Five)		
	Submission of Manuscript to guide	50	144
	Proof of submission of manuscript in Journal		
	Total	100	544

Continuous Evaluation: It consists of research/project process, interaction with guide/mentor, manuscript writing and submission of dissertation.

k. References:

- 1 Dissertation guide. PIPH.
- 2 Master's thesis guide: https://epi.washington.edu/wp-content/uploads/2021/03/Masters-Thesis-Guide.pdf
- 3 Master of Public Health (MPH) Thesis Guide: https://globalhealth.washington.edu/sites/ default/files/Thesis%20Guide May%202019 0.p