

**Bachelor of Vocation – Healthcare Management
Category-I
Undergraduate Curriculum Framework 2022(UGCF)**

Semester	DSE	Status
V	Basic Statistics	New
VI	Research Design & Methodology in Healthcare	New
VII	1. Research Design & Methodology in Healthcare. 2. Crisis Management in Healthcare. 3. Patient Psychology & Behavior 4. Dynamics of Start-Up in Healthcare Sector	New

**Bachelor of Vocation – Healthcare Management
Undergraduate Curriculum Framework 2022(UGCF)**

Discipline Specific Elective 3 : Basic Statistics

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-3-Basic Statistics	4	3	1	0	NA	NA

Learning Objectives:

To motivate students towards intrinsic interest in statistical thinking. To analyze and interpret data.

Learning Outcomes:

After completing this course, students should have developed a clear understanding of:

1. Basic concepts of Statistics.
2. Distinguish between different types of data.
3. Graphical methods of displaying data.
4. Measures of Locations and dispersion.
5. Concept of Bi-Variate Data.
6. Principle of Least Squares.
7. Introduction to the basics of Probability.

Syllabus

Unit 1 (8 Hours)

Concepts of a statistical population and sample, quantitative and qualitative data, discrete and continuous data. Presentation of data by tables and by diagrams, frequency distributions for discrete and continuous

data, graphical representation of a frequency distribution by histogram and frequency polygon, and cumulative frequency distributions.

Unit 2 (15 Hours)

Measures of Central Tendency: Arithmetic mean, Median and Mode , Measures of Dispersion: Range, Quartile Deviation and Mean Deviation, Variance, Standard deviation, and Coefficient of variation.

Unit 3 (12 Hours)

Bi-variate data: Scatter diagram, the principle of least-squares, and fitting of straight lines, Correlation and regression, Karl Pearson coefficient of correlation, Lines of regression, Spearman's rank correlation coefficient.

Unit 4 (10 Hours)

Random experiment, sample space, event, Definition of Probability, mutually exclusive events, Conditional probability and independent events. Bayes' theorem(without proof) and its applications

Practical component (if any) –

N/A

Essential/recommended readings

1. Das, M.N. and Giri, N.C. (1986) Design and Analysis of Experiments. Wiley Eastern.
2. Goon, A.M., Gupta, M.K. and Dasgupta, B. (2005). Fundamentals of Statistics (8th ed.

Suggested Readings-

1. Vol I). World Press, Kolkata.
2. J.E Freund (2009), Mathematical Statistics with Applications, 7th Ed, Pearson Education

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Discipline Specific Elective 4 : Research Design & Methodology in Healthcare

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-4- Research Design & Methodology in Healthcare	4	3	1	0	NA	NA

Learning Objectives

By the end of this course, students should be able to understand the fundamentals of research methodology and its significance in the healthcare sector. The course aims to inculcate research aptitude among the learners and equip them with knowledge and skills required to successfully undertake various steps in the research process

Learning outcomes

By studying this course, students will be able to:

1. Identify and define research problems in the healthcare sector.
2. Apply appropriate research methodologies for healthcare studies.
3. Collect and analyze quantitative and qualitative data effectively.
4. Utilize statistical tools and software for data analysis.

Syllabus

Unit 1: Introduction (10 Hours)

Meaning, Objectives, and Significance of Research in Healthcare Management, Types of Research: Exploratory, Descriptive, and Causal Research, Research Process and Steps in Research, Defining Research Problem and Formulating Hypotheses in Healthcare Research.

Unit 2: Research Design and Data collection (12 Hours)

Meaning, need, features of good design; Research Design: Exploratory, Descriptive, and Experimental, Sampling Techniques: Probability and Non-Probability Sampling, Data Collection Methods: Primary vs. Secondary Data, Questionnaire Design and Interview Methods, Measurement Scales and Reliability & Validity.

Unit 3: Data Analysis and Interpretation (8 Hours)

Introduction to Data Analysis- application of software for Data analysis with appropriate tools for Healthcare Research: Hypothesis Testing: Parametric and Non-Parametric Tests, Correlation and Regression Analysis, Interpretation of Research Findings.

Unit 4: Report Writing and Presentation (15 Hours)

Types of Research Reports, Structure and Components of a Research Report , Steps in Report Writing: Format and Presentation of Report, Review of related literature and its implications at various stages of research.Major findings, Conclusions and suggestions; Citation of references: Referencing (APA etc.), bibliography, Presentation of Research Findings,Ethics in Health Research- Confidentiality and privacy, informed consent, vulnerable cases and special treatments, standards of care – principles, review processes etc.

Essential/recommended readings-

1. Kothari, C.R. &Garg, Gaurav – Research Methodology: Methods and Techniques (2019)
2. Bhattacharyya, Dipak Kumar – Research Methodology (2006)
3. Krishnaswamy, K.N., Sivakumar, A.I. &Mathirajan, M. – Management Research Methodology: Integration of Methods and Techniques (2009)
4. Gupta, S.P. – Statistical Methods (2014)
5. Aggarwal, R.K.(2019)- Essentials of clinical research:A practical guide.Jaypee Brothers Medical Publishers.

Suggested Readings-

1. Kothari, B. L. (2007). Research Methodology: Tools and Techniques. Jaipur: ABD Publishers.
2. Malhotra, Naresh& Dash, SatyaBhushan – Marketing Research: An Applied Orientation (2017)
3. Mark Saunders: Research Methods for Business: Pearson Education, 2010.
4. Newman, W.L. (2021). Social Research Methods: Qualitative and Quantitative Approaches, 8th ed. Pearson.
5. Bryman, A., & Bell, E. (2011). Business research methods. 3rd ed. Cambridge; New York, NY: Oxford University Press.
6. ICMR Guidelines and Publications

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Discipline Specific Elective 5 : Research Design & Methodology in Healthcare

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-5- Research Design & Methodology in Healthcare	4	3	1	0	NA	NA

Learning Objectives

By the end of this course, students should be able to understand the fundamentals of research methodology and its significance in the healthcare sector. The course aims to inculcate research aptitude among the learners and equip them with knowledge and skills required to successfully undertake various steps in the research process

Learning outcomes

By studying this course, students will be able to:

1. Identify and define research problems in the healthcare sector.
2. Apply appropriate research methodologies for healthcare studies.
3. Collect and analyze quantitative and qualitative data effectively.
4. Utilize statistical tools and software for data analysis.

Syllabus

Unit 1: Introduction (10 Hours)

Meaning, Objectives, and Significance of Research in Healthcare Management, Types of Research: Exploratory, Descriptive, and Causal Research, Research Process and Steps in Research, Defining Research Problem and Formulating Hypotheses in Healthcare Research.

Unit 2: Research Design and Data collection (12 Hours)

Meaning, need, features of good design; Research Design: Exploratory, Descriptive, and Experimental, Sampling Techniques: Probability and Non-Probability Sampling, Data Collection Methods: Primary vs. Secondary Data, Questionnaire Design and Interview Methods, Measurement Scales and Reliability & Validity.

Unit 3: Data Analysis and Interpretation (8 Hours)

Introduction to Data Analysis- application of software for Data analysis with appropriate tools for Healthcare Research: Hypothesis Testing: Parametric and Non-Parametric Tests, Correlation and Regression Analysis, Interpretation of Research Findings.

Unit 4: Report Writing and Presentation (15 Hours)

Types of Research Reports, Structure and Components of a Research Report , Steps in Report Writing: Format and Presentation of Report, Review of related literature and its implications at various stages of research. Major findings, Conclusions and suggestions; Citation of references: Referencing (APA etc.), bibliography, Presentation of Research Findings, Ethics in Health Research- Confidentiality and privacy, informed consent, vulnerable cases and special treatments, standards of care – principles, review processes etc.

Essential/recommended readings-

6. Kothari, C.R. & Garg, Gaurav – Research Methodology: Methods and Techniques (2019)
7. Bhattacharyya, Dipak Kumar – Research Methodology (2006)
8. Krishnaswamy, K.N., Sivakumar, A.I. & Mathirajan, M. – Management Research Methodology: Integration of Methods and Techniques (2009)
9. Gupta, S.P. – Statistical Methods (2014)
10. Aggarwal, R.K. (2019)- Essentials of clinical research: A practical guide. Jaypee Brothers Medical Publishers.

Suggested Readings-

7. Kothari, B. L. (2007). Research Methodology: Tools and Techniques. Jaipur: ABD Publishers.
8. Malhotra, Naresh & Dash, Satya Bhushan – Marketing Research: An Applied Orientation (2017)
9. Mark Saunders: Research Methods for Business: Pearson Education, 2010.
10. Newman, W.L. (2021). Social Research Methods: Qualitative and Quantitative Approaches, 8th ed. Pearson.
11. Bryman, A., & Bell, E. (2011). Business research methods. 3rd ed. Cambridge; New York, NY: Oxford University Press.
12. ICMR Guidelines and Publications

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Discipline Specific Elective 5 : Crisis Management in Healthcare

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE- 5- Crisis Management in Healthcare	4	3	1	0	NA	NA

Learning Objectives

This course provides a comprehensive understanding of crisis management in healthcare settings. It explores the principles, strategies, and best practices for effectively managing crises that may arise in healthcare organizations, including natural disasters, pandemics, medical emergencies, and other critical incidents. The course emphasizes proactive planning, crisis response, and recovery to ensure the continuity of healthcare services and patient safety during challenging times.

Learning outcomes

Upon successful completion of this course, students will be able to:

1. Define and explain the principles of crisis management in the healthcare context.
2. Assess the vulnerabilities and risks that healthcare organizations may face during crises.
3. Create a comprehensive crisis management plan tailored to a specific healthcare setting.
4. Implement crisis response measures efficiently to mitigate the impact of a crisis.
5. Communicate effectively with stakeholders, patients, and the public during a crisis.
6. Draw insights from past healthcare crises to enhance crisis management approaches.

Syllabus

Unit 1(5 Hours)

Introduction to Crisis Management- Definition and scope of crisis management in healthcare, Understanding the importance of proactive crisis planning, Identifying common types of healthcare crises, Crisis Management Centres - design and operation

Unit 2(20 Hours)

Crisis Assessment and Preparedness- Risk assessment and vulnerability analysis in healthcare settings., Developing crisis management teams and protocols, Creating crisis communication plans, Crisis Response and

Resource Management, Implementing crisis response measures in healthcare organizations, Allocating and managing resources during a crisis, Ensuring patient safety and continuity of care.

Unit 3(10 Hours)

Crisis Communication and Public Relations- Importance of transparent and timely communication during a crisis, Addressing misinformation and managing public perception, Media engagement and crisis communication strategies, Media and Crisis Communications, Media Interview Training.

Unit 4(10 Hours)

Crisis Recovery and Resilience- Strategies for post-crisis recovery and adaptation, Building resilience in healthcare organizations; Evaluating the effectiveness of crisis management efforts.

Exercise Excellence - design, delivery, review, Preparing for Epidemics, Pandemics and Disasters in the Workplace, Supporting People after Traumatic Incidents.

Practical component (if any) –

N/A

Essential/recommended readings-

1. Trehan,N .(2021)Managing Health Crises: From the Frontlines of Healthcare Leadership. Harper Collins India.
2. Pankaj Gupta.(2020) Healthcare Crisis Management : Handling Emergency Situations in Healthcare Settings.Harper Collins India.
3. Agarwal,A. (2021) . Leading Through Crisis: Resilience and Recovery in Healthcare .Springer.
4. Varma , A.(2020).Crisis Management in Healthcare Organizations: Risk and Response. Wiley India.
5. Sundar, S. (2021). Pandemic Crisis Management: Lessons from India's Healthcare System. Springer.

Suggestive readings-

1. Kumar, R. (2022). Crisis Leadership in Healthcare : Navigating through Challenging Times. Springer.
2. Menon, G.K. (2022). Crisis management in Healthcare Organizations: A Comprehensive Guide. Springer.
3. Rao, K.S. (2020).Healthcare Crisis Management in India: Strategies and Solutions.Springer.
4. Agarwal , N. (2021) Healthcare Crisis Management: From Risk to Recovery .Jaypee Brothers Medical Publishers.

5. Mohan , C. (2021) , Managing Public Health Crises: Leadership Communication and Response.Springer.

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Discipline Specific Elective 5 : Patients Psychology & Behavior

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-5- Patients Psychology & Behaviour	4	3	1	0	NA	NA

Learning Objectives

It is aimed at helping the students to acquire knowledge & understanding of patient behavior and acquire the skills in managing them effectively in hospital settings.

Learning outcomes

1. Demonstrate an understanding of psychological theories and concepts relevant to patient behavior.
2. Analyze and interpret patient behavior in healthcare contexts using psychological frameworks.
3. Apply effective communication techniques to establish rapport and trust with patients.
4. Demonstrate cultural sensitivity in healthcare interactions and decision-making.
5. Develop strategies to address patient anxiety and improve coping mechanisms.
6. Devise patient-centered approaches to enhance treatment adherence and compliance.

Syllabus

Unit 1(10 Hours)

Introduction: History and origin of science of psychology , Definitions & Scope of Psychology , Relevance to Healthcare Managers , Methods of Psychology.

Unit 2(10 Hours)

Biology of behavior , Body mind relationship modulation process in health and illness , Genetics and behavior: Heredity and environment , Brain and behavior: Nervous system, Neurons and synapse, Association Cortex, Rt and Lt Hemispheres , Psychology of Sensations , Muscular and glandular controls of behavior , Nature of behavior of an organism/Integrated responses .

Unit 3(15 Hours)

Motivation and Emotional Processes : Motivation: Meaning, Concepts, Types, Theories, Motives and behavior, Conflict resolution ; Emotions & stress : Emotion: Definition components, Changes in emotions, theories, emotional adjustments, emotions in health and illness; Stress: stressors, cycle, effect, adaptation & coping; Communication and Patient-Provider Relationship : Verbal and non-verbal communication skills , Active listening and empathy , Building trust and rapport with patients.

Unit 4(10 Hours)

Developmental Psychology : Psychology of people at different ages from infancy to old age, Psychology of vulnerable individuals- challenged, women, sick, etc , Psychology of groups.

Practical component (if any) –

N/A

Essential/recommended readings

1. Introduction to Psychology by Clifford T.Norgan, Richard A.King
2. Psychology 5th Edition by Robert A.Baron/GirishwarMisra

Suggestive readings

1. Empathy: A History" by Susan Lanzoni
2. "The Compassionate Connection: The Healing Power of Empathy and Mindful Listening" by David Rakel

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**Bachelor of Vocation – Healthcare Management
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Discipline Specific Elective 5 : Dynamics of Start-Up in Healthcare sector

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-5- Dynamics of Start-Up in Healthcare sector	4	3	1	0	NA	NA

Learning Objectives:

To give the students an overview of entrepreneur and its types that would help students to understand basics of starting up new ventures, start-ups. The challenges they could face while starting up with new business.

To enable students to explore, launch entrepreneurial ventures in their own areas of interest.

Learning outcomes

After successful completion of the course students will be able to:

1. Understand the process and nature of entrepreneurship.
2. Identify the different ways in which entrepreneur manifests in start-ups
3. Evaluate the feasibility of pursuing the opportunity recognized
4. Know how to create one's own business venture and the various factors that influence successful set-up and sustainable operations.

Syllabus

Unit 1(8 Hours)

Entrepreneurship Journey -Meaning of entrepreneur, types of entrepreneur, making of an entrepreneur, role of innovation and creativity for start-ups, start-up opportunities, creativity: role of creative thinking in development and growth of new venture in India. Challenges in starting start-ups.

Unit 2(12Hours)

Business Setup- Characteristics of opportunity, where to look for opportunities, from identification to evaluation, forms of ownership and suitability, different modes of generating ideas, identification of opportunities: idea generation, selection and implementation, search for new ideas: techniques for generating ideas, scamper, brainstorming, mind mapping, storyboarding, role playing. Entry strategies: new product, franchising, buying an existing firm.

Unit 3(10 Hours)

Feasibility and Resource Mobilisation -Feasibility analysis: marketing, technical and financial feasibility analysis, industry and competition analysis, assessing new venture, economic environment and socio economic feasibility of the venture. Resource mobilization for entrepreneurship: resources mobilization, types of resources, process of resource mobilization, sources of financing.

Unit 4 (15Hours)

Scaling-up of Business and Entrepreneurship Ecosystem -Scaling ventures – preparing for change, harvesting mechanism and exit strategies, managing growth,

Reasons for new venture failures, the entrepreneurial ecosystem, business incubators, entrepreneurship in

India. Government initiatives, government grant and subsidies.

Objective/knowledge testing, Competency based evaluation using validated assessment tools and practical skill demonstration.

Projects/assignments with a grading rubric/scale emphasizing module competencies

Practical component (if any) –

N/A

Essential Readings -

1. Scarborough, N. M., Cornwall, J. R., & Zimmerer, T. (2016). Essentials of entrepreneurship and small business management. Boston: Pearson.
2. Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A.: Entrepreneurship, Tata McGraw Hill.

Suggested Readings-

1. M.B. Shukla . Entrepreneurship and Small Business Management :KitabMahal Publishers.
2. R.D. Hishrich., Peters, M., Entrepreneurship: Irwin, (latest edition)
3. Barringer, B.R. and R. Duane Ireland, Entrepreneurship, (latest edition)Pearson Prentice Hall

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