

ST TSEPHENS HOSPITAL COLLEGE OF NURSING  
B.SC. (HONS.) NURSING-THIRD YEAR  
COURSE PLAN

SUBJECT: NURSING RESEARCH & STATISTICS

H.O.D: Prof. Dr. Feba Geevarghese  
Principal cum Professor

Sub Coordinator-Ms. Sheljy Shajan

Theory-45 Hours  
Practical-45 Hours

Course Description-the course is designed to enable students to develop an understanding of basic concepts of research, research process and statistics and enable them to conduct or participate in need based research studies in various settings. Further the student will be able to utilize the research findings in providing quality nursing care

**Specific Objectives:** At the end of the course, the student will be able to

- Define the terms and concepts of research
  - Identify needs and scope of nursing research
  - Define research problems
  - Describe research approaches and research designs in nursing research
- Conduct participate in need based research studies in various setting

- Utilize the research in findings to provide quality nursing care

Unit	Time (Hrs)	Objective	Contents	A V AIDS	Teaching Learning Activities	Assessment Methods
I.	04	<ul style="list-style-type: none"> <li>• Describe the concept of research, terms, need, and scope of research</li> <li>• Explain the steps of research process</li> </ul>	<b>Research &amp; Research Process</b> <ul style="list-style-type: none"> <li>• Introduction and need for nursing research</li> <li>• Definition of Research and Nursing research</li> <li>• Steps of scientific method</li> <li>• Characteristics of good research</li> <li>• Steps of Research Process- Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> <li>• PowerPoint Presentation</li> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> </ul>	Long answer Short answer Objective type
II.	03	<ul style="list-style-type: none"> <li>• Identify and state research statements and objectives</li> </ul>	<b>Research Problems/Question</b> <ul style="list-style-type: none"> <li>• Identification of problem area</li> <li>• Problem statement</li> <li>• Criteria of a good research problem</li> <li>• Writing objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> <li>• PowerPoint Presentation</li> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> <li>• Assignments</li> </ul>	Long answer Short answer Objective type

III.	03	<ul style="list-style-type: none"> <li>Review the related literature</li> </ul>	<b>Review of Literature</b> <ul style="list-style-type: none"> <li>Location</li> <li>Sources</li> <li>On line search: CINHAL, COCHRANE etc.</li> <li>Purpose</li> <li>Method of Review</li> </ul>	<ul style="list-style-type: none"> <li>Over head Projector</li> <li>PowerPoint Presentation</li> <li>Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>Lecture method</li> <li>Discussion</li> <li>Assignments</li> </ul>	Long answer Short answer Objective type
IV.	04	<ul style="list-style-type: none"> <li>Describe the research approaches and designs</li> </ul>	<b>Research Approach and design</b> <ul style="list-style-type: none"> <li>Historical, Survey and Experimental</li> <li>Qualitative and Quantitative designs</li> </ul>	<ul style="list-style-type: none"> <li>Over head Projector</li> <li>PowerPoint Presentation</li> <li>Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>Lecture method</li> <li>Discussion</li> <li>Assignments</li> </ul>	Long answer Short answer Objective type
V.	08	<ul style="list-style-type: none"> <li>Explain the sampling process</li> <li>Describe the types of data collection</li> </ul>	<b>Sampling and data Collection</b> <ul style="list-style-type: none"> <li>Definition of population, sample, sampling criteria, factors influencing sampling process types of sampling techniques</li> <li>Data why-what, from whom, when and where to collect</li> <li>Data collection methods and instrument <ul style="list-style-type: none"> <li>Methods of data collection</li> <li>Questioning and interviewing</li> <li>Observation, record analysis and measurement</li> <li>Types of instruments</li> </ul> </li> <li>Validity &amp; Reliability of the instrument</li> </ul>	<ul style="list-style-type: none"> <li>Over head Projector</li> <li>PowerPoint Presentation</li> <li>Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>Lecture method</li> <li>Discussion</li> <li>Assignments</li> </ul>	Long answer Short answer Objective type

			<ul style="list-style-type: none"> <li>○ Pilot study</li> <li>○ Data collection procedure</li> </ul>			
VI.	04	<ul style="list-style-type: none"> <li>● Analyse,interpret and summarise the researrhc findings</li> </ul>	<b>Analysis of Data</b> <ul style="list-style-type: none"> <li>● Compilation</li> <li>● Tabulation</li> <li>● Classification</li> <li>● Summarization</li> <li>● Presentation</li> <li>● Interpretation of data</li> </ul>	<ul style="list-style-type: none"> <li>● Over head Projector</li> <li>● PowerPoint Presentation</li> <li>● Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>● Lecture method</li> <li>● Discussion</li> <li>● Assignments</li> </ul>	Long answer Short answer Objective type
VII.	15	<ul style="list-style-type: none"> <li>● Explain the use of statistics,scales of measurement and graphical presentation of data</li> <li>● Describe the methods of central tendency, variability and measure of correlation</li> </ul>	<b>Introduction to statistics</b> <ul style="list-style-type: none"> <li>● Definition, use of statistics, scales of measurement</li> <li>● Frequency distribution and graphical presentation of data</li> <li>● Mean, Median &amp; Mode</li> <li>● Standard deviation</li> <li>● Normal Probability and tests of significance</li> <li>● Co-efficient of correlation</li> <li>● Statistical packages and its application</li> </ul>	<ul style="list-style-type: none"> <li>● Over head Projector</li> <li>● PowerPoint Presentation</li> <li>● Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>● Lecture method</li> <li>● Discussion</li> <li>● Assignments</li> </ul>	Long answer Short answer Objective type
VIII.	04	<ul style="list-style-type: none"> <li>● Communicate and utilize the research findings</li> </ul>	<b>Communication and utilization of Research</b> <ul style="list-style-type: none"> <li>● Communication of research findings <ul style="list-style-type: none"> <li>○ Verbal report</li> <li>○ Writing research report</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Over head Projector</li> <li>● PowerPoint Presentation</li> <li>● Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>● Lecture method</li> <li>● Discussion</li> <li>● Assignments</li> </ul>	Long answer Short answer Objective

			<ul style="list-style-type: none"><li>○ Writing Scientific article/paper</li><li>- Critical review of published research</li><li>- Utilization of research findings</li></ul>			type
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ST TSEPHENS HOSPITAL COLLEGE OF NURSING  
B.SC. (HONS.) NURSING THIRD YEAR  
UNIT PLAN

SUBJECT: NURSING RESEARCH & STATISTICS

Unit-I  
Title- Research & Research Process  
Faculty- Ms. SheljyShajan

Unit	Specific Objective	Time (Hrs)	Contents	A V AIDS	Teaching Learning Activities	Assessment Methods
I	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>• Describe the concept of research</li> <li>• Define the terms of research</li> <li>• Explain the steps of research process</li> </ul>	04 Hrs	<b>Research &amp; Research Process</b>			
		1 hr	<ul style="list-style-type: none"> <li>• Introduction and need for nursing research</li> <li>• Definition of Research terms</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> </ul>	Describe the need of nursing research?
		1 hr	<ul style="list-style-type: none"> <li>• Steps of scientific method</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> </ul>	List the steps of research?
		1 hr	<ul style="list-style-type: none"> <li>• Characteristics of good research</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> </ul>	
		1 hr	<ul style="list-style-type: none"> <li>• Steps of Research Process- Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Discussion</li> </ul>	Explain the steps of good research?

Unit-II  
 Title- **Research Problems/Question**  
 Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Time (Hrs)	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods
II	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>• Discuss the criteria of a good research problem</li> <li>• Describe the components of research problem</li> </ul>	03	<b>Research Problems/Question</b> <ul style="list-style-type: none"> <li>•</li> </ul>			
		1 hr	<ul style="list-style-type: none"> <li>• Identification of problem area</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Assignments</li> </ul>	Describe the components of research problem
		2 hrs	<ul style="list-style-type: none"> <li>• Problem statement</li> <li>• Criteria of a good research problem</li> <li>• Writing objectives</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> <li>• Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method Discussion</li> </ul>	Discuss the criteria of a good research problem?

Unit-III  
 Title- **Review of Literature**  
 Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Time (Hrs)	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods	
III	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>• Discuss the importance of reviewing literature in research</li> <li>• Explain the sources of literature</li> </ul>	03	<b>Review of Literature</b>				
		1 hr	<ul style="list-style-type: none"> <li>• Location</li> <li>• Sources</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Assignments</li> </ul>	Discuss the sources of literature	
		1 hr	<ul style="list-style-type: none"> <li>• On line search: CINHAL, COCHRANE etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Discuss the importance of reviewing literature in research	
		1 hr	<ul style="list-style-type: none"> <li>• Purpose</li> <li>• Method of Review</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	Discussion	Explain the methods and purposes of literature?	

#### Unit-IV

#### Title- **Research Approach and design**

Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Hrs	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods



IV	At the end of the unit student will be able to	• 4	<b>Research Approach and design</b>	• Over head Projector	• Lecture method	List the types of various research approaches?
		1 hr	• Historical, Survey			
		1 hr	• Experimental design	PowerPoint Presentation	• Lecture method	
		1 hr	• Qualitative design	Board & chalk	• Discussion Assignments	Differentiate between experimental and non experimental research designs?
		1 hr	• Quantitative designs	PowerPoint Presentation	• Lecture method	

Unit-V  
**Title- Sampling and data Collection**  
Faculty- Ms. SheljyShajan

Unit		Time (Hrs)	<b>Contents</b>	• A V AIDS	• Teaching Learning Activities	Assessment Methods
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V	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>• Explain the sampling process</li> <li>• Differentiate between probability and non probability sampling</li> <li>• Describe the types of data collection</li> </ul>	08	<b>Sampling and data Collection</b>			
		1 hr	Definition of population, sample, sampling criteria	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Explain the sampling process?
		1 hr	<ul style="list-style-type: none"> <li>• factors influencing sampling process</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Assignments</li> </ul>	Differentiate between probability and non probability sampling?
		2 hr	<ul style="list-style-type: none"> <li>• types of sampling techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	
		1 hr	<ul style="list-style-type: none"> <li>• Data why-what, from whom, when and where to collect</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	
		1 hr	<ul style="list-style-type: none"> <li>• Data collection methods and instrument               <ul style="list-style-type: none"> <li>○ Methods of data collection</li> <li>○ Questioning and interviewing</li> <li>○ Observation, record analysis and measurement</li> <li>○ Types of instruments</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Describe the types of data collection?
		1 hr	<ul style="list-style-type: none"> <li>•               <ul style="list-style-type: none"> <li>○ Validity &amp; Reliability of the instrument</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Discuss the validity and reliability of tool

		1 hr	○ Pilot study	• Over head Projector	Lecture method	Significance of pilot study
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Unit-VI

Title-**Analysis of Data**

Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Time (Hrs)	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods
VI	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>Analyse,interpret and summarize the research findings</li> </ul>	04	<b>Analysis of Data</b>	Over head Projector	• Lecture method	Levels of measurement?
		1 hr	<ul style="list-style-type: none"> <li>Compilation</li> <li>Tabulation</li> </ul>			
		1 hr	<ul style="list-style-type: none"> <li>Classification</li> <li>Summarization</li> </ul>	• PowerPoint Presentation	• Assignments	Different methods of dataclassification ?
		2 hr	<ul style="list-style-type: none"> <li>Presentation</li> <li>Interpretation of data</li> </ul>	• Board &chalk	• Discussion	Different methods of data presentation

Unit-VII

Title-**Introduction to statistics**

Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Time (Hrs)	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods
VII	At the end of the unit	15	<b>Introduction to statistics</b>	• Over head	• Lecture method	Definition and

<p>student will be able to</p> <ul style="list-style-type: none"> <li>• Explain the use of statistics, scales of measurement and graphical presentation of data</li> <li>• Describe the methods of central tendency, variability and measure of correlation</li> </ul>	2hrs	<ul style="list-style-type: none"> <li>• Definition, use of statistics, scales of measurement</li> </ul>	Projector	<ul style="list-style-type: none"> <li>•</li> </ul>	scope of statistics
	2 hr	<ul style="list-style-type: none"> <li>• Frequency distribution and</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Assignments</li> </ul>	
	2 hr	<ul style="list-style-type: none"> <li>• graphical presentation of data</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Assignments</li> </ul>	
	2 hr	<ul style="list-style-type: none"> <li>• Mean, Median &amp; Mode</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Describe the methods of central tendency
	1 hr	<ul style="list-style-type: none"> <li>• Standard deviation</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Assignments</li> </ul>	Describe the measure of variability?
	2 hr	<ul style="list-style-type: none"> <li>• Normal Probability and tests of significance</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	
	2 hr	<ul style="list-style-type: none"> <li>• Co-efficient of correlation</li> </ul>	<ul style="list-style-type: none"> <li>• Board &amp; chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Assignments</li> </ul>	
	2 hr	<ul style="list-style-type: none"> <li>• Statistical packages and its application</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> <li>• Assignments</li> </ul>	

Unit-VII  
**Title-Communication and utilization of Research**  
Faculty- Ms. SheljyShajan

Unit	Specific Objectives	Time (Hrs)	Contents	• A V AIDS	• Teaching Learning Activities	Assessment Methods
VII	At the end of the unit student will be able to <ul style="list-style-type: none"> <li>• Communicate and utilize the research findings</li> </ul>	04	<b>Communication and utilization of Research</b>			
		2 hrs	Communication of research findings <ul style="list-style-type: none"> <li>○ Verbal report</li> <li>○ Writing research report</li> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>• Over head Projector</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture method</li> </ul>	Long answer Short answer Objective type
		2 hrs	<ul style="list-style-type: none"> <li>○ Writing Scientific article/paper</li> <li>- Critical review of published research</li> <li>- Utilization of research finding</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint Presentation</li> <li>• Board &amp;chalk</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Assignments</li> </ul>	