

NURSING RESEARCH AND STATISTICS

Total Hours : Theory – 45 Hour

Practical – 30 Hours per Week (Project work to be carried out during internship)

Unit/ Time(Hrs)	Learning Objectives	Content	Outcome
I (4Hrs)	<ul style="list-style-type: none"> • Describe the concept of research, terms, need and areas of research in nursing. • Explain the steps of research process. 	<p>Research and research process</p> <ul style="list-style-type: none"> • Introduction and need for nursing research. • Definition of Research & nursing research. • Steps of scientific method. • Characteristics of research. • Steps of research process - overview 	<ul style="list-style-type: none"> • Students will gain knowledge regarding the concept of research, terms, need and areas of research in nursing. • Students will be able to explain the steps of research process.
II (3 Hrs)	<ul style="list-style-type: none"> • Identify and state the Research problem • And objectives 	<p>Research Problem/Question</p> <ul style="list-style-type: none"> • Identification of problem area. • &Problem statement. • Stating objectives of the research problem. 	<ul style="list-style-type: none"> • Students will be able to identify problem area and will be able to frame problem statement. • Students will be able to frame objectives related to the research problem.
III (3Hrs)	<ul style="list-style-type: none"> • Review the related literature 	<p>Review of Literature</p> <ul style="list-style-type: none"> • Steps in review of literature • Identification of Publication • Keeping a record • Writing the review of literature • Writing of Bibliography 	<ul style="list-style-type: none"> • Students will be able to explain the steps of review of literature. • Will be able to do the identification of the publication. • Will understand the about the keeping record. • Will be able to write the review of literature and bibliography.

Unit Time (Hrs)	Learning Objectives	Content	Outcome
IV (4Hrs)	<ul style="list-style-type: none"> • Describe the research approaches and designs 	<p>Research approaches and designs</p> <ul style="list-style-type: none"> • Historical, survey and experimental • Qualitative and Quantitative designs 	<ul style="list-style-type: none"> • Students will understand the research approaches and types of research designs..
V (8 Hrs)	<ul style="list-style-type: none"> • Explain the sampling process • Describe the methods of data collection and Developing and standardizing an instrument 	<p>Sampling and data collection</p> <ul style="list-style-type: none"> • Definition of Population, Sample, Sampling criteria, factors influencing sampling process, types of sampling techniques. • Data collection Methods and instruments <ul style="list-style-type: none"> - Questionnaire, interview, records & reports and other techniques - Validity & Reliability of the instrument - Pilot Study 	<ul style="list-style-type: none"> • Students will be able to define the population, sample, sampling criteria, sampling process, factors influencing sampling techniques and types of sampling. • Students will understand the data collection methods and instruments. And validity and reliability of the instrument. • Students will gain knowledge regarding the pilot study

Unit Time (Hrs)	Learning Objectives	Content	Outcome
VI (15 Hrs)	<ul style="list-style-type: none"> • Explain the use of statistics, scales of measurement and graphical presentation of data • Describe the measures of central tendency and variability and methods of correlation 	<p>Introduction to statistics</p> <ul style="list-style-type: none"> • Definition, use of statistics, scales of measurement • Frequency distribution and graphical presentation of data • Mean, Median, Mode, standard deviation • Normal probability and tests of significance • Coefficient of correlation • Inferential statistics and types • Statistical packages and its application 	<ul style="list-style-type: none"> • Students will gain knowledge regarding the definition, use of statistics, scales of measurement • Will understand about the frequency distribution and graphical presentation of data • Will be able to use Mean, Median, Mode, standard deviation in data analysis. • Will understand the normal probability and tests of significance, Coefficient of correlation, Inferential statistics and types, Statistical packages and its application
VII (4 Hrs)	<ul style="list-style-type: none"> • Analyze, interpret and summarize the research data. 	<p>Analysis of Data</p> <ul style="list-style-type: none"> • Compilation, Tabulation • Classification, • summarization, presentation, interpretation of data 	<ul style="list-style-type: none"> • Students will be able to do the compilation and tabulation of data. • Students will be able to summarize, present and interpret the data their research study.

Unit Time (Hrs)	Learning Objectives	Content	Outcome
VIII (4 Hrs)	<ul style="list-style-type: none"> Communicate and utilize the research findings. 	<p>Communication and utilization of Research</p> <ul style="list-style-type: none"> Communication of research findings <p>- Verbal report - Writing research report - Writing scientific article/ paper- Critical review of published research & Utilization of research findings</p>	<ul style="list-style-type: none"> Students will be able to communicate the research findings, will be able to do verbal reporting, write research report, write scientific article, will be able to do the critical review of published article. Students will be able to utilize the research findings.