

NURSING RESEARCH AND STATISTICS

PLACEMENT: VI SEMESTER

THEORY: 2 Credits (40 hours)

PRACTICUM: Lab/Skill Lab: 1 Credit (40 hours) Clinical Project: 40 hours

DESCRIPTION: The Course is designed to enable students to develop an understanding of basic concepts of research, research process and statistics. It is further, structured to conduct/ participate in need-based research studies in various settings and utilize the research findings to provide quality nursing care. The hours for practical will be utilized for conducting individual/group research project.

COMPETENCIES: On completion of the course, students will be competent to

1. Identify research priority areas
2. Formulate research questions/problem statement/hypotheses
3. Review related literature on selected research problem and prepare annotated bibliography
4. Prepare sample data collection tool
5. Analyze and interpret the given data
6. Practice computing, descriptive statistics and correlation
7. Draw figures and types of graphs on given selected data
8. Develop research proposal
9. Plan and conduct a group/individual research project

NURSING RESEARCH AND STATISTICS

Unit	Time(Hrs.)	Learning Outcomes	Content	Teaching/Learning Activities	Assessment Methods
	T				
I	6	<p>Describe the concept of research, terms, need and areas of research in nursing</p> <p>Explain the steps of research process</p> <p>State the purpose and steps of Evidence Based Practice</p>	<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 good research • Steps of Research process – overview • Evidence Based Practice – Concept, Meaning, Purposes, Steps of EBPP process and Barriers 	<ul style="list-style-type: none"> • Lecture cum Discussion • Narrate steps of research process followed from examples of published studies • Identify research priorities in a given area /specialty • List examples of Evidence Based Practice 	<ul style="list-style-type: none"> • Short answer • Objective type
II	2	<p>Identify and state the research problem and objectives</p>	<p>Research Problem/Question</p> <ul style="list-style-type: none"> • Identification of problem area • Problem statement • Criteria of a good research problem • Writing objectives and hypotheses 	<ul style="list-style-type: none"> • Lecture cum Discussion • Exercise on writing statement of problem and objectives 	<ul style="list-style-type: none"> • Short answer • Objective type • Formulation of research questions/objectives/hypothesis

Unit	Time(Hrs.)	Learning Outcomes	Content	Teaching/ Learning Activities	Assessment Methods
III	2(T)	Review the related literature	Review of Literature <ul style="list-style-type: none"> • Location • Sources • Online search; CINHAL, COCHRANE etc. • Purposes • Method of review 	<ul style="list-style-type: none"> • Lecture cum Discussion • Exercise on reviewing one research report/article for a selected research problem • Prepare annotated Bibliography 	<ul style="list-style-type: none"> • Short answer • Objective type • Assessment of review of literature on given topic presented
IV	4(T)	Describe the Research approaches and designs	Research Approaches and Designs <ul style="list-style-type: none"> • Historical, survey and experimental • Qualitative and Quantitative designs 	<ul style="list-style-type: none"> • Lecture cum Discussion • Identify types of research approaches used from examples of published and unpublished research • Studies with rationale 	<ul style="list-style-type: none"> • Short answer • Objective type
V	6(T)	Explain the Sampling process Describe the methods of data collection	Sampling and data Collection <ul style="list-style-type: none"> • Definition of Population, Sample • Sampling criteria, factors influencing sampling process, types of sampling techniques • Data – why, what, from whom, when and where to collect • Data collection method and instruments <ul style="list-style-type: none"> ○ Methods of data collection ○ Questioning, interviewing ○ Observations, record analysis and measurement ○ Types of instruments, Valid 	<ul style="list-style-type: none"> • Lecture cum Discussion • Reading assignment on examples of data collection tools • Preparation of sample data collection tool • Conduct group research project 	<ul style="list-style-type: none"> • Short answer • Objective type • Develop in questionnaire/Interview Schedule/Checklist

			<p>ity&Reliability oftheInstrument</p> <ul style="list-style-type: none">• Researchethics• Pilotstudy• Datacollectionprocedure		
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VIII	4(T)	Communicate and utilize the research findings	Communication and utilization of Research <ul style="list-style-type: none"> • Communication of research findings • Verbal report • Writing research report • Writing scientific article/paper • Critical review of published research including publication ethics • Utilization of research findings • Conducting group research project 	<ul style="list-style-type: none"> • Lecture cum Discussion • Read/ Presentation of a sample published/unpublished research report • Plan, conduct and Write individual/group research project 	<ul style="list-style-type: none"> • Short answer • Objective type • Oral Presentation • Development of research proposal • Assessment of research Project
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DISTRIBUTION OF TEACHING HOURS

STRATEGY		Teaching hours	
Didactic	Lectures (24 Research+16 Statistics)		40
Non- didactic	Practical-Lab/Skill Lab / Small group discussion	30	80
		44	
	Tutorials (Research and Statistics)	04	
		02	
Total			120

TOPICS & OUTCOMES

Subjects	Number of Themes	Number of outcomes
Introduction To Nursing Research	6	
Statistics	2	

DISTRIBUTION OF THEORY HOURS

S N.	Theme	Topics	Teaching hrs.
1	Research and research process	Research and research process	6
2	Research Problem/Question	Research Problem/Question	2
3	Review of Literature	Review of Literature	2
4	Research Approaches & Designs	Research Approaches & Designs	4
5	Sampling & data Collection	Sampling & data Collection	6
6	Analysis of data	Analysis of data	4
7	Introduction to statistics	Introduction to statistics	12
8	Communication & Utilization of Research	Communication & Utilization of Research	4
	TOTAL		40

						Core competency		Non core competency	Hrs.
.No.	Subject	Theme and total hours allotted	Topic	Code No.	Competency	Must know	Desirable to know	Nice to know	
1	Introduction To Nursing Research	Unit I Research and research process (6 hours)	Research and research process	NRST405:VII SEM1.1	Define the terms and concept of Research, Nursing research and identify its needs, scope of nursing research	Introduction and need for nursing research Definition of Research & nursing research			1hour
				NRST405:VII SEM1.2	Explain research process and EBP	Steps of Research process – overview Evidence Based Practice – Concept, Meaning, Purposes,			2Hours
				NRST405:VII SEM1.3	Explain the steps of scientific method and characteristics of good Research		Steps of scientific method Characteristics of good Research		2hour
				NRST405:VII	Describe steps of EBP			Steps of EBP Process and	1hour

				SEM1.4	Process and Barriers			Barriers	
2	Introduction To Nursing Research	Unit II Research Problem/ Question (2Hours)	Research Problem /Question	NRST405:VII SEM 2.1	Identify the research problem or research question and determine sources the research problem or research question, Explain the steps of formulation of research problem,explain variables.	Identification and formulation of research problem. Identification and formulation of research problem Identification of variables			½ hour
				NRST405:VII SEM 2.2	Describe the meaning, characteristics, needs, types and method of stating research objectives and explainhypothesis and assumption.	Writing research objectives Hypothesis and Assumption			½ hour
				NRST405:VII SEM 2.3	Recognize the criteria for selecting a good research problem		Criteria of good research problem		1hour
3	Introduction To Nursing Research	Unit III Review of Literature (2Hours)	Review of Literature	NRST405:VII SEM3.1	Explain the review of literature, Evidence Based Practice nursing	Review of Literature <ul style="list-style-type: none"> • Location • Sources • Purposes • Method of Review 			1 hour

				NRST405:VII SEM 3.2	Illustrate the electronic sources from where literature can be searched,	Online Search: CINHAL, COCHRANE, etc.			1 hour
4	Introducti on To Nursing Research	Unit IV Research Approache s & Designs (4 Hours)	Research Approac hes & Designs	NRST405:VII SEM 4.1	Define research approaches & design and illustrate elements, factors influencing the selection of designs and validity of research design, describe Quantitative research Designs	<ul style="list-style-type: none"> • Introduction of research approaches & design with reference to elements and validity of research design • Quantitative research Designs 			1 hour
				NRST405:VII SEM 4.2	Identify the characteristics of qualitative and quantitative research design, differentiate between qualitative and quantitative research	<ul style="list-style-type: none"> • Characteristics of qualitative and quantitative research design • Difference between qualitative and quantitative research 			1 hour
				NRST405:VII SEM 4.3	Define and explain types, advantages and disadvantages of Experimental research design and non-experimental research design, survey	<ul style="list-style-type: none"> • Experimental and Non experimental research design • Survey 			1 hour
				NRST405:VII	Describe Qualitative research Designs with	<ul style="list-style-type: none"> • Qualitative research 		1 hour	

				SEM 4.4	reference to Historical research design Grounded theory, Phenomenological Ethnographic research,		designs.		
5	Introduction To Nursing Research	Unit: V Sampling & data Collection (6 hours)	Sampling & data Collection	NRST405:VII SEM 5.1	Define the basic terms related to Population, sample, sampling criteria, explain Sampling techniques	<ul style="list-style-type: none"> • Definition – Population, sample, sampling criteria • Sampling techniques 			1 hour
				NRST405:VII SEM5.2	Describe the different types of probability and non-probability sampling techniques.	<ul style="list-style-type: none"> • Sampling techniques 			1 hour
				NRST405:VII SEM 5.3	Explain the method of data collection and instruments, the interview, questionnaire, observation	<ul style="list-style-type: none"> • Data Collection Methods and instruments • Methods of data collection- Questioning, interviewing, observations 			½ hour
				NRST405:VII SEM 5.4	Define, explain the pilot study. explain Data collection Procedure	<ul style="list-style-type: none"> • Pilot study • Data collection Procedure 			½ hour
				NRST405:VII	Explain record analysis, illustrate the Factors	<ul style="list-style-type: none"> • Record 			2hour

				SEM 5.5	influencing sampling process ,explain validity and reliability of research instrument		analysis & instruments <ul style="list-style-type: none"> • Factors influencing sampling process • Validity and reliability of the instruments 		
				NRST405:VII SEM 5.6	Define concept of data and classify data, types of instruments.			<ul style="list-style-type: none"> • Data - Why, what, from whom, when and where to collect. • Types of Instruments 	1hour
8	Introduction To Nursing Research	Unit VIII : Communication & Utilization of Research	Communication & Utilization of Research	NRST405:VII SEM 8.1	Describe the criteria and methods of communicating the research findings, Critical review of published research	<ul style="list-style-type: none"> • Communication of research findings • Verbal reports • Critical review of published research 			2 Hour

		(4Hours)		NRST405:VII SEM 8.2	Determine the barriers in utilization of nursing research and strategies to overcome them	Utilization of research findings			1Hour
				NRST405:VII SEM 8.3	Define, explain writing research report, scientific article/paper		Writing research report Writing scientific article/paper		1Hour

TEACHING STRATEGY:

Total Hours: 120

Theory Hours: 40

Clinical/Practical Hours: 80

Theory**Continuous Assessment: 10Marks**

Sr. No	Assignments	Percentage of Attendance	Allotted marks	Total Marks for attendance
1	Attendance	95-100%	2	2 marks
		90-94%	1.5	
		85-89%	1	
		80-84%	0.5	
		<80%	0	
		Number assignments	Marks	Total Marks
2	Written Assignments Home assignment 01- Nursing Research 01- Statistics	2	2X5	10
3	Seminar/Microteaching/Individual presentation 1. Prepare annotated Bibliography 2. Presentation of research report	2	2x6	12
4	Group work/Work/Report 1. RESEARCH GROUP PROJECT	1	1x6	06
Total				30/3=10Marks

Note: If there is mandatory module in that semester, marks obtained by student out of 10 can be added to 30 totaling 40 marks

Total=40/4=10marks

DISTRIBUTION OF NONDIDACTIC HOURS (80 Hours)**PRACTICALS –**

S.N	Comp. no	Research Project Group Work	Domain	T-L Method	Teaching Hrs
1	NRST 405:VIISEM 2.1	Formulate research questions/problem statement/hypotheses	K,S	Lecture cum Small group discussion	8 hrs
2	NRST 405:VIISEM 3.1	Review related literature on selected research problem and prepare annotated	K	Lecture cum Small group discussion	6 hrs

		bibliography			
3	NRST 405:VIISEM 4.1	Identify types of research approaches used from examples of published and unpublished research	K,S	Lecture cum Small group discussion	1hr
4	NRST 405:VIISEM 5.3	Preparation of sample data collection tool	K	Lecture cum Small group discussion	6 hrs
5	NRST 405:VIISEM 6.1	Analyze and interpret the given data	K,S	Lecture cum Small group discussion	6 hrs
6	NRST 405:VIISEM 7.1	Practice on graphical presentations Practice on computation of measures of central tendency, variability & correlation	K,S	Lecture cum Small group discussion	8 hrs
7	NRST 405:VIISEM 8.2	Read/ Presentations of a sample published/ unpublished research report Plan, conduct and Write individual/group research project	K,S	Lecture cum Small group discussion	5 hrs 40 hrs
	Total Hrs				80 Hrs.

TUTORIAL(6hours)

S N.	Comp. no	TOPIC	Domain	T-L Method	Teaching Hrs
1.	NRST 405:VIISEM 1.3	Evidence based practice	K	Tutorials	1 hr
2.	NRST 405:VIISEM 4.1	Research design	K	Tutorials	1 hr
3.	NRST 405:VIISEM 5.1	Sampling	K	Tutorials	1 hr
4.	NRST 405:VIISEM 5.3	Data collection	K	Tutorials	1 hr
5.	NRST 405:VIISEM 7.1	Introduction to Statistics	K	Tutorials	1 hr
6.	NRST 405:VIISEM 7.9	Correlation and Coefficient	K	Tutorials	1 hr
Total					6

Formative Assessment**1. Sessional Examinations: Theory: I**

Sr. No.	Question paper – Theory	Total
Maximum marks	30	30

2. Sessional Examinations: Theory: II

Sr. No.		Total
Maximum marks	30	30

Two sessional exams per course

Calculation of Internal Assessment (IA): Theory

- Total marks of two sessional examinations along with continuous assessment $30\text{marks} \times 2 = 60/4 = 15$
- $10 + 15 = 25$ Marks
- Minimum required - 50 %

3. Summative Assessment

a. Theory:

Type of questions	Number of questions	Marks allotted
MCQ	9X1	9Marks
Essay/situation type	2x15	30Marks
Short	2x5	10Marks
Very short	3x2	06Marks
	Total	55marks

Datta Meghe Institute of Medical Sciences (Deemed to be University)

Smt. Radhikabai Meghe Memorial College of Nursing

Sawangi (Meghe) Wardha

Name of the Institute: SRMM College of Nursing

Name of Examination: Basic B.Sc. Nursing

Semester VII: Nursing Research

NRST 405: VIISEM /Primary/2021-2025

	Must to Know (MK 60%)	Desirable to know (DK 30%)	Nice to know (NK 10%)	Marks = 55
ESSAY (4) 2/4	(4) Level-I-2 Level-II-2			15Mx2=30M
SHORT (2) 2/3	(2) Level-I-1 Level-II-1	(1) Level-I-1		5Mx2= 10M
VERY SHORT (3) 3/4	(2) Level-I-1 Level-II-1	(1) Level- I-1	(1) Level-I-1	2Mx3=06M
MCQ (9) 9/9	(5) Level-I-4 Level-II-1	(3) Level-I-2 Level-II-1	(1) Level-I-1	1Mx9=9M
Total				Total = 55 Marks

Level I: 80

Level II: 20