

Name of Faculty	:	Faculty of Nursing
Name of Program	:	Basic B.Sc. Nursing
Course Code	:	2BSN04
Course Title	:	Health/Nursing Informatics And Technology
Type of Course	:	PC
Year of Introduction	:	2023-24

Pre requisite	:	Basic Knowledge of Informatics
Course Objective	:	This course is designed to equip novice nursing students with knowledge and skills necessary to deliver efficient informatics-led health care services.
Course Outcomes	:	On completion of the course, the students will be able to
	CO1	Develop a basic understanding of computer application in patient care and nursing practice.
	CO2	Apply the knowledge of computer and information technology in patient care and nursing education, practice, administration and research.
	CO3	Describe the principles of health informatics and its use in developing efficient healthcare.
	CO4	Demonstrate the use of information system in healthcare for patient care and utilization of nursing data.
	CO5	Demonstrate the knowledge of using Electronic Health Records (EHR) system in clinical practice.
	CO6	Apply the knowledge of interoperability standards in clinical setting.
	CO7	Apply the knowledge of information and communication technology in public health promotion.
	CO8	Utilize the functionalities of Nursing Information System (NIS) system in nursing.
	CO9	Demonstrate the skills of using data in management of health care.
	CO10	Apply the knowledge of the principles of digital ethical and legal issues in clinical practice.
	CO11	Utilize evidence-based practices in informatics and technology for providing quality patient care.
	CO12	Update and utilize evidence-based practices in nursing education, administration, and practice

Teaching and Examination Scheme

Teaching Scheme (Contact Hours)			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			C	SEE	CIA	SEE	CIA	
2	2	0	3	25	25	0	0	50

Legends: **L**-Lecture; **T**-Tutorial/Teacher Guided Theory Practice;**P** - Practical, **C** - Credit, **SEE** - SemesterEnd Examination, **CIA** - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content

Unit No.	Topics	Teaching Hours	Weightage	Mapping With COs
I	Introduction to computer applications for patient care delivery system and nursing practice <ul style="list-style-type: none"> • Use of computers in teaching, learning, research and nursing practice 	10	25%	CO1,CO2,
	<ul style="list-style-type: none"> • Windows, MS office: Word, Excel, Power Point • Internet • Literature search • Statistical packages • Hospital management information system 			
II	Principles of Health Informatics <ul style="list-style-type: none"> • Health informatics - needs, objectives and limitations • Use of data, information and knowledge for more effective healthcare and better health 	04	10 %	CO3,CO4
III	Information Systems in Healthcare <ul style="list-style-type: none"> • Introduction to the role and architecture of information systems in modern healthcare environments • Clinical Information System (CIS)/Hospital information System (HIS) 	03	7.5%	CO4
IV	Shared Care & Electronic Health Records <ul style="list-style-type: none"> • Challenges of capturing rich patient histories in a computable form • Latest global developments and standards to enable lifelong electronic health records 	04	10 %	CO5

	to be integrated from disparate systems.			
V	Patient Safety & Clinical Risk <ul style="list-style-type: none"> Relationship between patient safety and informatics Function and application of the risk management process 	03	7.5%	CO6
VI	Clinical Knowledge & Decision Making <ul style="list-style-type: none"> Role of knowledge management in improving decision-making in both the clinical and policy contexts Systematized Nomenclature of Medicine, Clinical Terms, SNOMED CT to ICD-10-CM Map, standardized nursing terminologies (NANDA, NOC), Omaha system. 	03	7.5%	CO7
VII	eHealth: Patients and the Internet <ul style="list-style-type: none"> Use of information and communication technology to improve or enable personal and public healthcare Introduction to public health informatics and role of nurses 	03	7.5%	CO8
VIII	Using Information in Healthcare Management <ul style="list-style-type: none"> Components of Nursing Information system(NIS) Evaluation, analysis and presentation of healthcare data to inform decisions in the management of health-care organizations 	03	7.5%	CO9
IX	Information Law & Governance in Clinical Practice <ul style="list-style-type: none"> Ethical-legal issues pertaining to healthcare 	04	10%	CO10

	<p>information in contemporary clinical practice</p> <ul style="list-style-type: none"> Ethical-legal issues related to digital health applied to nursing 			
X	<p>Healthcare Quality & Evidence Based Practice</p> <ul style="list-style-type: none"> Use of scientific evidence in improving the quality of healthcare and technical and professional informatics standards 	03	7.5%	CO11,CO12

Suggested Distribution of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyse	Evaluate	Create
Weightage	25	30	30	5	5	5

NOTE: This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Suggested List of Experiments/Tutorials

Sr.No.	Name of Experiment/Tutorial	Teaching Hours	Mode of Teaching
1	Introduction to computer application for patient care	15	Hospital setting
2	Use of data, Information and knowledge for more effective health care and better health	05	
3	To understand hospital information system.	05	
4	Latest trend in electronic health records standards and interoperability.	04	
5	Prepare report on standardize language used in health informatics.	06	
6	Presentation of health care data	05	

Reference Books

Sr. No.	Name of Reference Books
1	Textbook of Health Nursing Informatics and Technology for B.sc Nursing students by Priyanka Randhir, 2 nd edition , CBS publishers and distributors Private Limited.
2	Health/Nursing Informatics and Technology for B.sc Nursing students by Dr. Rebecca Jadhav, Jaypee Publication
3	Nursing Informatics and Technology(Computers for Nurses) by Deepak sethi and Sukhbir kuar , Jaypee publication, 1 st edition
4	Health/Nursing Informatics and Technology for B.sc Nursing students by Neelamkumari, Peevee Publication
5	Health/ Nursing Informatics and Technology(Computers for Nurses) by R Sreevani, 1 st edition, 2023.Jaypee publication