



**MAHATMA GANDHI UNIVERSITY**  
*of*  
**MEDICAL SCIENCES & TECHNOLOGY**  
JAIPUR

# VAC 25

# NURSING INFORMATICS

Campus:  
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# Mahatma Gandhi Nursing College

## Value Added Course - Nursing Informatics

### Total hours - 30

Unit	Time (Hrs)		Learning Outcomes	Content	Teaching/ Learning Activities
	T	P/L			
I	4	2	Describe the importance of computer and technology in patient care and nursing practice  Demonstrate the use of computer and technology in patient care, nursing education, practice, administration and research.	<ul style="list-style-type: none"> <li>• Use of computers in teaching, learning, research and nursing practice</li> <li>• Windows, MS office: Word, Excel, Power Point</li> <li>• Literature search</li> <li>• Hospital management information system</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practice session</li> <li>• Visit to hospitals with different hospital management systems</li> </ul>
II	4	1	Describe the principles of health informatics  Explain the ways data, knowledge and information can be used for effective healthcare	<p><b><u>Principles of Health Informatics</u></b></p> <ul style="list-style-type: none"> <li>• Health informatics – needs, objectives and limitations</li> <li>• Use of data, information and knowledge for more effective healthcare and better health</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practical session</li> <li>• Work in groups with health informatics team in a hospital to extract nursing data and prepare report</li> </ul>
III	3	1	Describe the concepts of information system in health  Demonstrate the use of health information system in hospital setting	<ul style="list-style-type: none"> <li>• Introduction to the role and architecture of information</li> <li>• <u>Clinical Information System (CIS)/Hospital information System (HIS)</u></li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration</li> <li>• Practical session</li> </ul>
IV	4	4	Explain the use of electronic health records in nursing practice  Describe the latest trend in electronic health records standards and interoperability	<ul style="list-style-type: none"> <li>• <u>Challenges of capturing rich patient histories in a computable form</u></li> <li>• <u>Latest global developments and standards to enable lifelong electronic health records to be integrated from disparate systems.</u></li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Practice on Simulated EHR system</li> <li>• Practical session</li> <li>• Visit to health informatics department of a hospital to understand the use of EHR in nursing practice</li> </ul>
	2		Describe the advantages and limitations of health informatics in maintaining patient safety and risk management	<ul style="list-style-type: none"> <li>• <u>Relationship between patient safety and informatics</u></li> <li>• <u>Function and application of the risk management process</u></li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> </ul>
VI	3	2	Describe the functions of nursing information system  Explain the use of healthcare data in management of health care organization	<p><b><u>Using Information in Healthcare Management</u></b></p> <ul style="list-style-type: none"> <li>• Components of Nursing Information system (NIS)</li> <li>• Evaluation, analysis and presentation of healthcare data to inform decisions in the management of health-care organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• Discussion</li> <li>• Demonstration on simulated NIS software</li> <li>• Visit to health informatics department of the hospital to understand use of healthcare data in decision making</li> </ul>