



# Course Specification

— (Bachelor)

Course Title: **Information Technology in Nursing/Theory**

Course Code: **NRS 485**

Program: **Bachelor of Nursing**

Department: **Basic Nursing**

College: **College of Nursing**

Institution: **Majmaah University**

Version: **V4**

Last Revision Date: **June 2023**



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## A. General information about the course:

### 1. Course Identification

1. Credit hours: 3 (3+0+0)

#### 2. Course type

A.  University  College  Department  Track  Others  
 B.  Required  Elective

3. Level/year at which this course is offered: (8<sup>th</sup> level- 4<sup>th</sup> year)

#### 4. Course general Description:

In this course, the students will be formally introduced to information technology in nursing, health and healthcare. This course is designed to prepare students to critically analyze and synthesize the application of healthcare information technology in professional nursing practice. This course provides an overview of nursing informatics for the advanced practice nurse.

5. Pre-requirements for this course (if any):

NA

6. Pre-requirements for this course (if any):

NA

#### 7. Course Main Objective(s):

Students will be able to:

- Explore the use of informatics in nursing practice and its role in enhancing client care,
- Gain an appreciation of the competencies required of an expert knowledge worker
- Apply the relevance of those competencies to his day-to-day practice as a nurse.
- Examine the issues related to the protection of privacy, confidentiality, security of information in health care environments.





## 2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>		
4	Distance learning	45	100

## 3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
<b>Total</b>		

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and understanding</b>			
1.1	Define health informatics, its uses and application in health field and nursing in particular.	K1.1	Lecture Discussion	Written exams
1.2	Discuss the use of e-health and Telehealth to deliver health care to the wider community.	K3.1	Lecture Discussion	Written exams





Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
<b>2.0</b>	<b>Skills</b>			
2.1	Demonstrates how healthcare information systems and electronic health records can be used to enhance client care.	S3.1	Lecture Discussion	Written exams Assignment Project
2.2	Criticize the different types of information technology systems.	S5.1	Lecture Discussion	Written exams Assignment
...				
<b>3.0</b>	<b>Values, autonomy, and responsibility</b>			
3.1	Appreciate the importance of electronic recording in improving the quality of care and patient safety	V1.1	Lecture Discussion	Professionalism and group discussion Project
3.2	Discuss the concepts of privacy, confidentiality and security of information in electronic environments.	V2.1	Lecture Discussion	Written exams Professionalism and group discussion
...				

### C. Course Content

No	List of Topics	Contact Hours
1.	<b>Unit 1:</b> Overview of Nursing Informatics	٣
2.	<b>Unit 2:</b> Introduction to Information, Information Science, and Information Systems	٣
3.	<b>Unit 3:</b> Introduction to Cognitive Science	4
4.	<b>Unit 4:</b> Improving the Human Technology Interface	4
5.	<b>Unit 5:</b> Computer science and the foundation of Knowledge	4





6.	<b>Unit 6:</b> Clinical applications of health informatics	8
7.	<b>Unit 7:</b> Tele-Health	4
8.	<b>Unit 8:</b> Tele-Nursing	4
9.	<b>Unit 9:</b> Nursing Informatics Competencies	4
10.	<b>Unit 10:</b> Legal and Ethical Issues Related to Nursing Informatics	4
11.	<b>Unit 11:</b> Revision	3
<b>Total</b>		<b>45</b>

#### D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quizzes	3rd and 11 week	10%
2.	Project	14th week	10%
3.	Midterm Exam	10 <sup>th</sup> week	30%
4.	Assignments	4 <sup>th</sup> and 10 <sup>th</sup> week	10%
5.	Final Exam	17th - 18th week	40%

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

#### E. Learning Resources and Facilities

##### 1. References and Learning Resources

<b>Essential References</b>	<p>Hebda. T. &amp; Czar. P. (2012) <b>Handbook of Informatics for Nurses and Healthcare Professionals</b>. 5th ed. Upper Saddle River, NJ: Pearson.</p> <p>ISBN-13: 9780132574952 ISBN: 0132574950</p>
<b>Supportive References</b>	<p>Brothers Medical Publishers (P) Ltd. ISBN 10: 935025350X ISBN 13: 9789350253502</p> <p>Sewell, J.P., &amp; Thede L. Q. <b>Informatics and Nursing: Opportunities and Challenges</b>. 2013, 4th Ed. Philadelphia, PA: Wolters Kluwer \Lippincott Williams &amp; Wilkins. ISBN-13: 978-1609136956 ISBN-10: 1609136950</p>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.sdl.edu.sa">www.sdl.edu.sa</a></li> <li>• <a href="http://www.informaticsnurse.com">www.informaticsnurse.com</a></li> <li>• <a href="http://cna.ca/journal/journal.html">cna.ca/journal/journal.html</a></li> <li>• <a href="http://www.amia.org">www.amia.org</a></li> </ul>





### Other Learning Materials

Computer programs help student to apply the different uses of health informatics

## 2. Required Facilities and equipment

Items	Resources
<p><b>facilities</b> (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)</p>	<ul style="list-style-type: none"> <li>• <b>Class rooms with computer with internet access for 30 students.</b></li> <li>• <b>The number of seats 30 to 40.</b></li> <li>• <b>Laboratories accommodating 10-20 students</b></li> </ul>
<p><b>Technology equipment</b> (projector, smart board, software)</p>	<ul style="list-style-type: none"> <li>• <b>classroom equipped with smart or active board, latest Audio visual aids and</b></li> <li>• <b>Audio video data show facility</b></li> <li>• <b>Smart Board</b></li> </ul>
<p><b>Other equipment</b> (depending on the nature of the specialty)</p>	<p><b>Healthcare information model if available</b></p>

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students / Program leader	Course Evaluation Survey (Indirect method) Quality of Exam Survey (Direct method)
Effectiveness of Students assessment	Faculty / Program leader	Direct method: CLO Mapping with teaching & assessment. Course Blueprinting Grade Analysis Psychometric Analysis
Quality of learning resources	Students / Faculty / Program leader	Indirect method: ✓ Academic advising survey Student experience survey
The extent to which CLOs have been achieved	Faculty member / Quality assurance committee / Program leader	Direct method: ✓ Direct assessment outcome analysis Course report preparation
Other	Students / Program leader	Course Evaluation Survey (Indirect method) Quality of Exam Survey (Direct method)

**Assessors** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)





## G. Specification Approval

<b>COUNCIL /COMMITTEE</b>	<b>DEPARTMENT COUNCIL</b>
<b>REFERENCE NO.</b>	٦
<b>DATE</b>	10.03.2024

