Republic of the Philippines
Cebu Normal University
College of Nursing

A UbD Syllabus in Nursing Informatics

Course Code: IT
Course Title: Informatics
Placement: BSN III, 2nd Semester
Credits: 2 Units lecture, 1 unit laboratory

Vision of CNU

A multidisciplinary research university of education committed to build a strong nation.

Mission of CNU

To develop high-performing professionals and intellectuals proficient in generating new knowledge toward a progressive and peaceful pluralistic society.

Course Description

This Course deals with the use of information technology system and data standards based on nursing informatics principles / theories. It further deals with the utilization of clinical information systems in the management and decision making of patient care. A laboratory session shall be provided for practice application.

Goal

This course aims to provide BSN III students with the basic knowledge, attitude and skills related to the study of the application of informatics and new technology in the field of nursing. This further utilizes the nursing informatics model as a framework for the technological competency as caring in nursing.

Objectives

At the end of the course and given relevant and actual or simulated situations / conditions, the student will be able to:

1. Apply concepts, theories and principles of informatics in nursing and health care.
2. Discuss issues and trends in informatics relevant to nursing and health.

Conceptual Framework of the Course

In modern day nursing the use of informatics and technology takes a vital role in patient care. In order to be competent in her nursing task, the nurse needs not only a superficial knowledge in the basic in computers, the BSN III students is introduced to a deeper, though basic, knowledge of nursing informatics in the application of technology in patient care.

Nursing Science is considered the world of this study. The 3 domains of Cognitive Science, Information Science and computer science interweave each other and form
the field of Nursing Informatics. This is a specialty in nursing that integrates this 3 domains to manage and communicate data, information, knowledge and wisdom in nursing practice.

### Computers and Nursing

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<tr>
<th>Desired Results</th>
<th>Assessment Evidence</th>
<th>Learning Experiences</th>
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| The students can recall and enumerate the history and relationship of nursing and computers in the development of a competent health care and to acquire the knowledge of the purposes of informatics in the field of nursing | 1. Pass the quizzes and classroom with 70% passing score.  
2. Submission of acceptable requirements such as portfolio, etc. | 1. Explaining the relationship of nursing and computers in health care.  
2. Tracing the history of nursing informatics in the Philippines  
3. Describing the mechanism of the electronic health record in the field of nursing  
4. Taking test exercises of the History and development of the application of computers in the field of nursing |

#### Elements

1. Evocative Lecture-discussion  
2. Cooperative Learning/Group dynamics  
3. Quiz Bowl  
4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)

#### Essential Questions

1. What are the relationships of computers to nursing?  
2. When did the application of computer assisted care reached the Philippines?  
3. What was the first software programs used in hospitals then?  
4. How did computers and new technology enhanced the Philippine Health Care System
## Computer System

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| The students can identify parts of the computer and enumerate the types of software and application in the clinical setting. Also, they can develop an understanding of data processing and the use of internet as a source of nursing literatures. | 1. Pass the quizzes and classroom with 70% passing score.  
2. Submission of acceptable requirements such as portfolio, etc. | 1. Identify the parts of the computer  
2. Enumerate software and operating systems that is useful in the field of nursing care.  
3. Tracing the process of data processing.  
4. Demonstrates the use of wireless devices in clinical setting  
5. Identifying websites that can be use as nursing resources.  
6. Taking test exercises related to computer systems. |

### Elements
1. Evocative Lecture-discussion  
2. Cooperative Learning/Group dynamics  
3. Quiz Bowl  
4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)  

### Essential Questions
1. What are the basic parts of the computer?  
2. Give examples of software that are used in the hospital.  
3. What is the difference between Propriety Software and propriety Software’s?  
4. What is the mechanism of data processing?  
5. How to use wireless devices in the clinical area?
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| The students will be able to use legal issues and knowledge in the responsible use of IT software. Creatively evaluate Health Care Data Standards. | 1. Pass the quizzes and classroom with 70% passing score.  
2. Submission of acceptable requirements such as portfolio, etc.  
3. Creative writing about Legal issues embodying software copyrights | 1. Enumerate international and local health care policy and responsible use of IT software.  
2. Identify the advantages of the use of technology in drug administration  
3. Present health care data standards set by international IT organizations  
4. Describing dependable data systems used in the nursing profession  
5. Taking test exercises of related to issues in nursing informatics. |

**Elements**
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2. Cooperative Learning/Group dynamics  
3. Quiz Bowl  
4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)

**Essential Questions**
1. What are the policies and laws set by the Philippines about the proper usage of Health Care IT software?  
2. What are the advantages of the use of technology in health care especially in the administration of drugs?  
3. What are health care IT standards set by US Federal and other partnerships?  
4. How will you describe a dependable IT system for health care?
## Informatics Theory

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| The students will be able to utilize the nursing informatics model in their nursing practice with high degree of competence and to develop a creative and innovative nursing practice with the correct values, attitude and skills. | 1. Pass the quizzes and classroom with 70% passing score.  
2. Submission of acceptable requirements such as portfolio, etc. | 1. Explaining the Nursing Informatics model focusing on its application in the nursing field. |
| | | 2. Description of the advance terminology systems |
| | | 3. Demonstrating the use of clinical information systems. |
| | | 4. Explaining the Technological Competency as Caring in Nursing Theory. |
| | | 5. Taking test exercises of related to theories and model in nursing informatics. |

### Elements
1. Evocative Lecture-discussion  
2. Cooperative Learning/Group dynamics  
3. Quiz Bowl  
4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)

### Essential Questions
1. What are the components of the nursing informatics model?  
2. What does advance terminology systems mean?  
3. How can you apply and upgrade clinical information systems?  
4. How will you explain "Technological Competency as Caring in Nursing Theory?"
**Practice Application**

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<td>The students will enhance their skills and familiarity of IT tools in its application in the subspecialties of Nursing. Develop a critical nursing skills in trouble shooting software problems and enhanced preparation in case of data corruption and restore.</td>
<td>1. Pass the quizzes and classroom with 70% passing score. 2. Submission of acceptable requirements such as portfolio, etc. 3. Graded simulation of IT tools as applied in health care.</td>
<td>1. Demonstrating the relevance and application of IT tools in the profession and its subspecialties 2. Familiarize internet tools for advance nursing practice 3. Simulate Nursing Informatics Vignette in the virtual laboratory. 4. Simulation of an IT trouble and restore procedure</td>
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**Elements**

1. Evocative Lecture-discussion  
2. Cooperative Learning/Group dynamics  
3. Quiz Bowl  
4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)  
5. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)  

**Essential Questions**

1. What are the possible applications of IT Tools in the field of nursing?  
2. What are examples of internet tools or web tools that are useful in the practice of nursing?  
3. What are the procedure in restoring lost data and troubleshooting errors in hospital IT management systems?
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| The student can competently explain the assistance a computer can offer to consumers and patients. | 1. Pass the quizzes and classroom with 70% passing score.  
2. Submission of acceptable requirements such as portfolio, etc.  
3. Graded group discussions regarding the consumer support for FOSS and propriety software | 1. Explain the importance of computer assistance in health care  
2. Describe consumer support for computers and software  
3. Taking test exercises of related to consumers use of informatics. |

**Elements**

1. Evocative Lecture-discussion  
2. Cooperative Learning/Group dynamics  
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4. Case Study Analysis (in-depth examination, inquiry, investigation, study, appraisal, estimation, evaluation, and judgment and ultimately leads to synthesis)  
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**Essential Questions**

1. How can computers and software improve health delivery and health status of our clients?  
2. Where can consumers or patients who use technology or software or hardware call for support?
Assessment Criteria for the Requirements

The student is assessed according to:

1. Written Mid-term and Final Examination

   At the middle and the end of the semester, and multiple choice examination will be given to all students with 70% as the passing rate. The criterion for test construction is focused application of nursing informatics in the field of nursing practice.

2. Daily quizzes and quiz bowl result
3. Simulation exercises
4. Assignments and Group works

Assessment Grades

Students should refer to the CNU-Graduate School related policies and procedures manual for detailed information in grading, etc.

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