

**SEATTLE UNIVERSITY COLLEGE OF NURSING**

**Course Number, Title:** NURS 511 Nursing Informatics

**Credits:** 3 credits

**Prerequisites:** Instructor permission

**Faculty:** Michael Beebe, RN, DNS, MSc  
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**Office Hours:** TBA

**Course Description:**

An introductory graduate-level course that examines terminology and tools of the nursing informatics field for application to clinical practice, administration, education, community, and research.

**Course Objectives:**

- Upon completion of this course, the learner will:
1. Demonstrate enhanced literacy and knowledge of computer functions.
  2. Integrate knowledge representation and information access with a variety of applications present in nursing and healthcare systems.
  3. Analyze the socio-technical and bioethical issues involved in nursing informatics.
  4. Evaluate marketed technology for nursing applications.

**Class Dates:** Sept. 24 – Dec. 10, 09

**Class Seminar Time:** Thursday, 6 – 8:40 PM

**Class Location:** Computer Lab – CPL (James Tower)

**Required Text:**

Saba, Virginia K., & McCormick, Kathleen Ann. (2006). *Essentials of nursing informatics* (4<sup>th</sup> ed.). McGraw-Hill Professional Publishing.  
Consumer Reports, June, 2009 issue.

**Grading:**

Final grade computation is as follows:

A	4.0 (94 and up)	**C	2.0-2.2 (73-76)
A-	3.7-3.9 (90-93)	C-	1.7-1.9 (70-72)
B+	3.3-3.6 (87-89)	D+	1.3-1.6 (67-69)
B	3.0-3.2 (83-86)	D	1.0-1.2 (63-66)
B-	2.7-2.9 (80-82)	D-	0.7-0.9 (60-62)
C+	2.3-2.6 (77-79)	F	0.0-0.6 (below 60)

\*\*“C” is the minimum passing grade in the College of Nursing for APNI and Foundation courses. All other Specialty courses have B- as passing.

**Referral to Disabilities Services:**

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to discuss your needs and arrange support services and/or accommodations through Disabilities Services staff in the Learning Center, Loyola 100, (206) 296-5740.

If English is not your first language and you have trouble finishing the exams in a timely fashion, please come talk to me.

**Statement from the Seattle University Code of Student Conduct Handbook – Standards of Conduct**

“Standards of conduct assist each student in the development of a responsible lifestyle rewarding to the individual student, respectful of the rights of others, and compatible with the legal norms of society. It is neither possible nor necessary to specify every instance of behavior or misconduct that could result in disciplinary action against a student. Conduct that evidences good intentions, mature consideration of the foreseeable consequences, and respect for the rights and property of others generally will not conflict with University standards.” (Code, p. 9)

Refer to the Code of Student Conduct regarding the following areas: Demonstrate Respect for: Self, Others, Relationships, Community, Honesty, and Property. (Code, pp. 5-7).

**Seattle University Nondiscrimination Policy**

Seattle University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, marital status, sexual orientation, gender identity, political ideology or status as a Vietnam-era or special disabled veteran in the administration of any of its education policies, admission policies, scholarship and loan programs, athletics, and other school-administered policies and programs, or in its employment related policies and practices.

All University policies, practices and procedures are administered in a manner consistent with Seattle University’s Catholic and Jesuit identity and character. Inquiries relating to these policies may be referred to the University’s Assistant Vice President for Human Resources and Equal Opportunity Officer. Consistent with the requirements of Title IX of the Education Amendments

of 1972 and its implementing regulations, Seattle University has designated three individuals responsible for coordinating the University's Title IX compliance. Students or employees with concerns or complaints about discrimination on the basis of sex in employment or an education program or activity may contact any one of the following Title IX coordinators:

**Gerald Huffman**, Assistant Vice President for Human Resources  
University Services Building 107 (206) 296-5869  
[huffmaje@seattleu.edu](mailto:huffmaje@seattleu.edu)

**Dr. Michele Murray**, Assistant Vice President  
Student Center 140B (206) 296-6066  
[mmurray@seattleu.edu](mailto:mmurray@seattleu.edu)

**Dr. Jacquelyn Miller**, Associate Provost for Academic Affairs  
Administration 104 (206) 296-5446  
[jcmiller@seattleu.edu](mailto:jcmiller@seattleu.edu)

Individuals may also contact the Office for Civil Rights of the U.S. Department of Education.

**Teaching and Learning Activities:**  
**Specific Course Information**

Course outline:

- Overview of Nursing Informatics – How it relates to medical informatics. Develop working definitions of informatics and their applications in nursing and healthcare. Nursing and healthcare have broad areas of context ranging from education and research to primary care and public health. Various uses of nursing informatics in these application areas of nursing will be explored.
- Data and Knowledge Representation – The very basis of informatics is the storage and manipulation of data and information. How can knowledge be represented? What approaches have been taken? What were the problems? What is the ultimate goal of the information in each application? Discuss existing data standards and the electronic health record.
- Decision Support – An important goal of informatics is to allow the nurse to make better and more fully informed clinical decisions. An understanding of how and why people make decisions helps in developing useful informatics systems.
- Information Access – Information need versus information retrieval. Discuss the current methods of search engines and the use of the internet. Additionally, the contrast between the many and complex issues related to information availability and information security will be explored.

- Sociological and Technical issues – “mind the culture”. Informatics is a blend of technology and people. The technology could be flawless, but the informatics system could fail by disregarding other disciplines such as corporate culture, management sciences, education, psychology, and others. Discuss strategies for integrating social, political and technical contexts. In this context we will examine technologies such as Twitter and Facebook and their potential place in a modern health care setting.
  - Evaluation and Technology Assessment – A systematic approach to evaluation will be presented. Strategic planning and system selection will also be discussed. Project management tools will be presented as well.
  - Bioethical Issues – Privacy, security, and bioethics issues and tools will be explored.
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### **Nursing Informatics Schedule**

Week 1 (September 24)

Session 1 – Course Overview and Key Issues/Terms for Nursing Informatics

Week 2 (October 1)

Session 2 - Computer (HW/SW/UI) Literacy

Week 3 (October 8)

Session 3 – Characteristics of an HIS/NIS - tour eICU @ Swedish

Week 4 (October 15)

Session 4 – Electronic Clinical Record (Beebe/Corpuz – VA)

Week 5 (October 22)

Session 5 – Knowledge and Data Representation; Decision Support;

Week 6 (October 29)

Session 6 - Evaluation & Technology Assessment

Week 7(November 5)

Session 7 - Socio-technical & Bioethical Issues

Week 8 (November 11)

Session 8 - Information Access/Security

**Week 9 (November 19)**

Session 9 - Project Management

**Week 10 (December 3)**

Session 10 – Preliminary Student Presentations

**Week 11 (December 10)**

Session 11 – Final Student Presentations