COURSE DESCRIPTION:
Provides an overview of nursing informatics as a means to improve information management in healthcare. Consideration of healthcare technologies with ethical and financial criteria in relation to the quality of their outcomes.

Prerequisites:
Acceptance in the RN to BSN Program

Co-requisites:
None

LEARNING RESOURCES:
2. Internet access to our Canvas site at: https://oregonstate.instructure.com
3. Online library access and other online resources to access supplemental readings

STUDENT LEARNING OUTCOMES:
Upon completion of this class, students in NUR 411 will be able to:

1. Identify information technologies that support safety and quality decision making in healthcare.
2. Discuss nurses’ involvement in design, selection, implementation and evaluation of information technologies that support client care.
3. Identify legal and ethical issues related to healthcare technology and social media

PROGRAM COMPETENCIES IN NURSING:
Upon satisfactory completion of the degree in Nursing, the students will have met the program competencies found at http://health.oregonstate.edu/degrees/competencies

COURSE CONTENT: Topics covered will include:
1. Evolution of healthcare technologies
2. Information systems in healthcare
3. Information systems beyond the walls: Telehealth and Social Media
4. Selecting and implementing health information systems
5. Informatics for patient education and communication
**EVALUATION OF STUDENT PERFORMANCE:**

<table>
<thead>
<tr>
<th>Evaluation Item</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Presentation</td>
<td>25 pts</td>
</tr>
<tr>
<td>Information System Application for Decision Making Paper</td>
<td>45 pts</td>
</tr>
<tr>
<td>Participation in Discussion (3 pts per week)</td>
<td>30 pts</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100 pts</td>
</tr>
</tbody>
</table>

Grading Standard: xxx points possible
- A 93-100%
- A- 90-92%
- B+ 87-89%
- B 83-86%
- B- 80-82%
- C+ 77-79%
- C 73-76%
- C- 70-72%
- D+ 67-69%
- D 63-66%
- D- 60-62%
- F 0-59%

**Description of Evaluation Items**

**Team Presentation – due Week 7**
Teams of 2 – 3 students will develop a Powerpoint presentation to share with the class. Select either social media in healthcare or a public online health information site. Provide an overview, identify risks and benefits of use and provide recommendations for nurses regarding the appropriate use of the social media or website.

**Information System Application for Decision Making Paper – due Week 9**
Write a 5-page paper discussing the process used in your work environment to make decisions about information system selection and implementation. Identify nursing’s role in decision making and evaluation.

**Participation in Discussion – Ongoing every week**
**Discussion question response:** Post a 150 – 200-word substantive response to the discussion question(s) posed by the due date. A substantive response needs to include the rationale for your answer as well as how it can be applied to practice. The substantive response needs to be supported by the readings for the week and/or your practice experience. Include examples if relevant.

**Participation:** Post substantive responses to at least two classmates discussion question responses. Substantive responses need to demonstrate critical analysis of the classmate’s posting and a thoughtful response supported by the readings for the week and/or your practice. Comments such as “good idea” or “I agree” do not constitute a substantive response.

**DIVERSITY STATEMENT**
The College of Public Health and Human Sciences strives to create an affirming climate for all students including underrepresented and marginalized individuals and groups. Diversity encompasses differences in age, color, ethnicity, national origin, gender, physical or mental ability, religion, socioeconomic background, veteran status, sexual orientation, and marginalized groups. We believe diversity is the synergy, connection, acceptance, and mutual learning fostered by the interaction of different human characteristics.
EXPECTATIONS FOR STUDENT CONDUCT
The Student Conduct Code establishes community standards and procedures necessary to maintain and protect an environment conducive to learning, in keeping with the educational objectives of Oregon State University. This code is based on the assumption that all persons must treat one another with dignity and respect in order for scholarship to thrive. For the full Student Conduct Code see http://oregonstate.edu/studentconduct/

Academic or Scholarly Dishonesty is prohibited and considered a serious violation of the Student Conduct Code. It is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another. For specifics related to offenses proscribed by the University see: http://oregonstate.edu/studentconduct/offenses-0.

RELIGIOUS HOLIDAY STATEMENT
Oregon State University strives to respect all religious practices. If you have religious holidays that are in conflict with any of the requirements of this class, please see me immediately so that we can make alternative arrangements.

STUDENTS WITH DOCUMENTED DISABILITIES
“Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.”

OSU-CASCADES ETHOS STATEMENT
The guiding vision of OSU-Cascades is to contribute significantly to intellectual, cultural, ecological, social and economic vitality. To achieve that goal, the OSU-Cascades community will strive to model principles and practices of a thriving, equitable and sustainable society. A culture of learning and exploration provides significant rewards to its members; those rewards are best achieved when all community members (faculty, staff, administrators, students and Board of Advisors) strive to honor the following principles:

1. Respect the dignity and uniqueness of individuals. This principle applies to a diversity of cultures, belief systems, academic ranks and academic/ professional disciplines.
2. Aspire to excellence and integrity in every endeavor.
3. Consider current and future generations in every deliberation.
4. Demonstrate leadership in service to community.
Course Schedule

Week 1: Evolution of Healthcare Technologies

Textbook Readings:
- Chapter 1 Health Informatics: Introduction, Definition and Significance
- Chapter 11 Public Health Informatics
- Chapter 35 The Evolving History of Health Informatics

Supplemental Resources:
1. Affordable Care Act helps expand the use of health information technology. Available at http://www.hrsa.gov/about/news/pressreleases/121220healthcenternetworks.html
2. 3 Ways Affordable Care Act Can Empower Health IT http://www.informationweek.com/healthcare/leadership/3-ways-affordable-care-act---can-empower-health-it/d/d-id/1113758

Discussion Questions:
- How is information technology used within your practice setting for evidence based practice?
- How is it used for quality improvement?
- Post a flow chart depicting the evolution of healthcare informatics in your organization.

Week 2: Information Systems in Healthcare

Textbook Readings:
- Chapter 6: Electronic Health Records and Applications for Managing Patient Care
- Chapter 7: Administrative Application for Healthcare

Supplemental Resources:
2. INFORMATION TECHNOLOGY TO SUPPORT NURSING DECISION-MAKING https://www.youtube.com/watch?v=kldCT3ml_OQ
3. Examples of using the QSEN Informatics competency: http://qsen.org/tag/informatics/page/5/

Assignment:
- Identify a technology application used within your institution to facilitate decision making. Write a 5 page paper discussing the use of the application, the process of selecting the application, cost of implementation, nursing role in selecting the application and the impact on quality of decision making. Due Week 9.

Discussion Questions:
- What role do nurses have in selecting and evaluating information systems within your work environment?
- What strategies facilitated implementation of the information system and/or what were the barriers to implementation?

Week 3: Information Systems Beyond the Walls: Telehealth
Textbook Readings:
- Chapter 8 Telehealth and Applications for Delivering Care at a Distance
- Chapter 9 Home Health and Related Community Based Systems.

Supplemental Resources:
1. What is telehealth? (click on links to various state models)
   http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Telehealth/whatisTelehealth.html

Discussion Questions:
- Identify at least two potential ethical issues that could be of concern for nurses with telehealth delivered care.
- What recommendations do you have to help nurses deal with these potential ethical issues?

Week 4: Information Systems Beyond the Walls: Social Media

Textbook Readings:
- Chapter 13 Social Media Tools for Practice and Education

Supplemental Resources:

Assignment:
- In groups of 2 - 3 students, create a 7-8 slide PowerPoint presentation discussing the benefits and risks of either social media in healthcare or online health information sites. Include speaker notes to clarify the slides. Due Week 7. Your team’s PowerPoint presentation will be shared with your classmates in Week 9.

Discussion Questions:
- Discuss at least two potential ethical issues that could be of concern with nursing use of social media.
- What recommendations do you have to help nurses deal with these potential ethical issues?

Week 5: Selecting Information Systems

Textbook Readings:
- Chapter 16 Strategic Planning and Selecting an Information System
Supplemental Resources:
3. Financing healthcare technology (click on the links to frequently asked questions for decision making) http://www.hrsa.gov/healthit/toolbox/HIVAIDSCaretoolbox/FinancingHealthIT/index.html

Discussion Questions:
✓ What is and/or should be nursing’s role in decision making regarding selecting information systems?

Week 6: Implementing Information Systems

Textbook Readings:
- Chapter 19 Implementing and Upgrading an Information System

Supplemental Resources:

Discussion Questions:
✓ What training is provided when a new information system is implemented in your organization?
✓ Are/should nurses involved in evaluating the health information systems?

Week 7: Informatics for Patient Communication

Textbook Readings:
- Chapter 12 The Engaged ePatient; Chapter 14 Personal Health Records
- Chapter 15 mHealth – The Intersection of Mobile Technology and Health

Supplemental Resources:
1. Impact of Healthcare Informatics on Quality of Patient Care and Health Services. https://www.youtube.com/watch?v=yvKvQf1ZuAo
2. Evaluating Health Information https://www.ucsfhealth.org/education/evaluating_health_information/

Discussion Questions:
✓ What electronic communication strategies are used at your organization to communicate with patients?
✓ Based on your organization’s HIPAA policy, how is patient privacy and confidentiality protected?
Week 8: Informatics for Education

Textbook Readings:
- Chapter 32 Informatics Tools for Education of Health Professions
- Chapter 33 Simulation in Healthcare Education

Supplemental Resources:

Discussion Questions:
- How can simulation be used in the clinical setting to promote learning and/or debrief after a critical incident?
- What has been your experience with simulated learning and how would you assess its effectiveness?

Week 9: Informatics for Evidence Based Practice

Textbook Readings:
- Chapter 3: Use of Evidence Based Practice and Practice Based Evidence in Health Informatics
- Chapter 24 Patient Safety and Quality Initiatives in Health Informatics

Supplemental Resources:

Discussion Questions: Review classmates’ power point presentations regarding social media or online health websites.
- What was your greatest ‘aha’ moment based on your classmates presentations regarding social media? How will this new insight impact your practice?
- What was your greatest ‘aha’ moment based on your classmates presentations regarding health websites? How will this new insight impact your practice?

Week 10: Future Directions for Informatics in Healthcare

Textbook Readings:
- Chapter 36 Future Directions and Future Research in Health Informatics

Supplemental Resources:
3. How has the field of nursing informatics changed? - with Ruth Slater
   https://www.youtube.com/watch?v=WBtc9YcRYX8

4. Simulation & Informatics: The Future of Nursing Education.
   http://www.wiser.pitt.edu/sites/wiser/ns08/day1_NW_IsSimulationTheFuture.pdf


**Discussion Questions:**

✓ What is your vision for the future of informatics in nursing practice?