Introduction to Health Informatics within Nursing
N2240F/G - NRSG7064

2016-2017

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The Western-Fanshawe Collaborative BScN Program N2240/NRSN-7064 Introduction to Health Informatics within Nursing, 2016-2017
Introduction to Health Informatics within Nursing

N2240f/g NRSG7064

Calendar Description:

This course will extend students’ knowledge and skills related to information literacy and knowledge acquisition skills necessary for professional nursing practice. Through active learning, students will determine appropriate knowledge sources for nursing practice.

Course Description:

This course introduces the knowledge, skills and attitudes necessary for the use of information technology by nurses in relation to client care, health care administration, client teaching, nursing education and research. This course was designed to make students aware of professional, legal and ethical issues associated with the use of informatics within nursing. Students will explore the professional application of information technology in nursing education, professional practice and research.

Course Goals:

Students will:

1. enhance information literacy knowledge and skills to critique and inform personal and professional practice.
2. build upon year one learning to deepen understanding of the multiple components that create evidenced-informed practice.
3. understand and critique how information technology has shaped, and will continue to shape nursing practice.
4. begin to comprehend the socio-technological relationship among the health care system, the nursing profession and client-centred health care teams.
5. recognize how information technology influences health (care) issues including social justice.
6. explore the CNO Practice Standards and Guidelines in relation to information technology, client centred care and professional practice.
7. explore information technology use in relation to the personal/professional context to develop the skill set required to establish a professional presence online.
8. be self-directed and accept responsibility for own learning.
Major Concepts in the course:

1. Clients
2. Context/culture
3. Health
4. Health promotion
5. Technology/informatics
6. Safety
7. Interprofessional collaborative practice
8. Health care system
9. Caring
10. Client-centred care
11. Social justice
12. Professionalism
13. Ethical practice
14. Communication
15. Critical reflection
16. Evidence informed practice
17. Health information literacy
18. Political influences

National Nursing Entry-to-Practice Competencies (CNO, 2009) addressed in the course:

- Professional Responsibility and Accountability: 2, 5, 8, 9, 13, 18
- Knowledge-Based Practice: 27, 31, 32, 34, 35, 36, 42, 44, 49, 51, 55, 61, 67, 68, 69, 84
- Ethical Practice: 88, 89, 92, 93, 94, 95, 99, 100
- Service to the Public: 107, 108, 111, 112, 113
- Self-Regulation: 115, 116, 121, 123

Interprofessional Competencies addressed in the course:

- Interprofessional communication
- Role clarification
- Patient/Client/Family/Community-centred care
- Team functioning

Nursing Informatics Competencies (CASN, 2012) addressed in the course:

- Uses relevant information and knowledge to support the delivery of evidence-informed patient care
- Uses ICTs in accordance with professional and regulatory standards and workplace policies

The Western-Fanshawe Collaborative BScN Program N2240/NRSG-7064 Introduction to Health Informatics within Nursing, 2016-2017
• Uses information and communication technologies in the delivery of patient/client care

How this course will contribute to your development as a professional nurse:

Health informatics in nursing will contribute to students’ development as professional nurses by introducing students to the emerging importance of health(care) facilitated by information and communication technologies. Similarly, this course will provide students with the basis from which to critique how knowledge is generated and circulated with respect to information literacy. Students will learn how to effectively use social technologies to develop an online professional presence. Through engagement with course learning activities, students will begin to build their knowledge and vocabulary of health informatics for the nursing profession.

How this course will contribute to your development as an interprofessional team member:

This course will provide students with the basis to understand how health informatics and health information technologies are transforming participation and participants within the health care team. Through active engagement with course learning activities, students will begin to understand how health informatics and health information technologies are influencing how knowledge is generated, shared, and distributed within the interprofessional health team and consumers/patients/clients. Similarly, students will be introduced to the professional practice benefits and challenges created by the intersection of health informatics, the media, vendors of technology, and the regulatory/government organizations. Other insights into how health informatics can be used to assist in interprofessional collaboration and sharing will also be considered and illustrated using case studies, and other learning materials and activities.

How we will work together:

In this course, learning and teaching are a shared responsibility. The instructor’s role is to guide, facilitate and support your learning. As a student, it is expected that you will be prepared to actively engage in weekly dialogue and reflective, critical thought. The course and accompanying learning activities are designed to foster discussion, debate, and critical examination of concepts relevant to health informatics within nursing. Weekly attendance is expected since small group and class discussions will facilitate learning, and your active participation will support not only your own but your colleagues’ learning. In order to create an interactive learning environment, students will be asked to share within groups, and at times with the larger class, their understanding of course material, their experiences and to engage in reflection on their learning. Completing assigned weekly readings / learning activities prior to classes will enhance your success in the course.

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Textbooks and other resources:

There is no required textbook for this course. Required reading materials in the form of journal articles can be located electronically through the Western/Fanshawe library systems. Other material that we can share electronically (e.g., podcasts, videos, images) will typically be hyperlinked from the weekly learning activities or housed online in the appropriate Sakai or FanshaweOnline weekly folder.

Recommended Resource:


**Weekly Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Concept</th>
<th>Course Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction: What are Health and Nursing Informatics?</td>
<td>1,2,3,4,5,9,10,18</td>
<td>2,6,8</td>
</tr>
<tr>
<td>2</td>
<td>Ethical Practice &amp; Social Media</td>
<td>1-5,9,12-15</td>
<td>1-3,6</td>
</tr>
<tr>
<td>3</td>
<td>Ethical Practice and Privacy</td>
<td>1-5,9,12-15,18</td>
<td>1-3,6-8</td>
</tr>
<tr>
<td>4</td>
<td>Evidence-Informed Practice and Informatics</td>
<td>1,10,13-18</td>
<td>3-6,8</td>
</tr>
<tr>
<td>5</td>
<td>Consumer Health Informatics and eHealth</td>
<td>1-4,9,10,14,15,17-18</td>
<td>All</td>
</tr>
<tr>
<td>6</td>
<td>Consumer Health Informatics and eHealth (continued)</td>
<td>1-4,9,10,14,15,17-18</td>
<td>All</td>
</tr>
<tr>
<td>7</td>
<td>Electronic Health Technologies: eHealth Records</td>
<td>1,5,7-9,12-13,17</td>
<td>3,4,7,8</td>
</tr>
<tr>
<td>8</td>
<td>Electronic Health Technologies: eHealth Records (continued)</td>
<td>1,5,7-9,12-13,17</td>
<td>3,4,7,8</td>
</tr>
<tr>
<td>9</td>
<td>Technology Enabled Models of Care</td>
<td>1,5,7,10-18</td>
<td>2-4,7,8</td>
</tr>
<tr>
<td>10</td>
<td>Policy</td>
<td>all</td>
<td>3-6,8</td>
</tr>
<tr>
<td>11</td>
<td>Social Justice</td>
<td>all</td>
<td>3-6,8</td>
</tr>
<tr>
<td>12</td>
<td>Future directions of health informatics in nursing</td>
<td>all</td>
<td>3-6,8</td>
</tr>
<tr>
<td>13</td>
<td>Semester synthesis</td>
<td>all</td>
<td>2,3-6,8</td>
</tr>
</tbody>
</table>
Opportunities to Demonstrate Learning

1. Learning Portfolio

The Learning Portfolio is an ongoing assignment (both individual and group components) that enables a student to critically reflect on course concepts explored and discussed in the course. During the first class a further description of the Learning Portfolio will be presented. Students are encouraged to use a variety of creative methods to develop their Learning Portfolios, including blog-like style presentation, inclusion of media relevant to analysis (e.g., images, video), and other digital artefacts that can be linked into the Portfolio. In summary, the Learning Portfolio should reflect a collection of key ‘learnings’ related to the assigned course content and emergent class discussions, and include evidence of:

- learning ‘artefacts’ (e.g., video, images, reflections, documents...)
- journal article references and other scholarly publication citations to reinforce your arguments/analysis
- course content linked to current world events
- critical thinking
- professional composition
- innovation / creativity

The purposes of this assignment are for you to:

- synthesize course material by generating creative reflections on content and development of other learning artefacts.
- critically analyze course content related to health informatics within nursing.
- develop creativity and innovation in thinking and problem solving

Assignment Process:

- Portfolio 1 and Portfolio 2 are individual assignments. For both these assignments, drawing on your knowledge from the assigned readings, material presented, and/or discussion stemming from class, you will develop as separate posts in your Learning Portfolio. These posts will contribute to the development of an electronic learning portfolio, generated within the online learning system (OWL at the Western site and Fanshawe Online at the Fanshawe site). Examples of Portfolios will be shown in class.
- Portfolio 3 is a group assignment. For this assignment, your small group will synthesize the knowledge arising from Weeks 8 to 11 (inclusive) into an artefact that can be presented to the entire class on Week 12. Guest adjudicators may be brought into review and offer feedback on the assignment during Week 12’s class. Possible examples for Portfolio 3 include the development of a comprehensive mind-map.
diagram(s), online re-representation of the week’s content, or some other form of creative delivery. Please check with your instructor related to the suitability of your group’s potential delivery style of Portfolio 3 on/by week 9.

• Be prepared to share and present your emergent Learning Portfolio entries with others during class time.

Criteria for evaluation:

• **Scholarly writing** and use APA (6th ed.) formatting and referencing (when applicable).
• Use of evidence-informed literature and other sources of knowledge to justify your responses and critiques.
• Creativity and cohesiveness of overall Learning Portfolio posts.

Due date and requirements:

• Portfolio 1 – consists of material arising from Weeks 1 and 3. 650 word requirement (not including images, other media, or references) for the post. **Due Week 4. 20%**

• Portfolio 2 – consists of material arising from Weeks 4 to 7 (inclusive). 1500 word requirement (not including images, other media, or references) for the post. **Due Week 8. 35%**

• Portfolio 3 – consists of Weeks 8 to 11 (inclusive). **Due during class of Week 12. 15%**

**Portfolio 1 and Portfolio 2 are individual assignments. Portfolio 3 is a group assignment.**

• **Grade:**
  o Portfolio 1 = 20% of overall grade
  o Portfolio 2 = 35% of overall grade
  o Portfolio 3 = 15% of overall grade
2. Health Organization Online Presence Facilitation

The purpose of this assignment is for students to review, analyse, and critique a health organization’s online presence to foster the critical skills necessary for nurses to engage effectively in patient education in the context of burgeoning online health information. Working in your student group, and based on evidence found in the literature, you will evaluate the organization’s online presence, including the use of social media to reach its target population, and critique how well the healthcare organization engages with their consumer-base. Each student group will deliver their analysis and engage the class in a meaningful facilitation based on the organization’s online health presence, including the strengths, weaknesses, and areas for improvement or refinement. **For the purposes of this assignment, students are not to contact the organization they are examining.** Further rationale to this request will be provided in class. A predetermined health organization will be provided by your course instructor at week 2.

The purposes of this assignment are for your group to:

- gain awareness of various consumer populations and how their healthcare needs are being met (or not) through the use of online technology.
- develop an understanding of online health information interventions to assist in the healthcare of a wide-range of consumers.
- develop understanding related to the use of information communication and social technologies in the distribution and management of health related conditions in the community.
- develop skills in critically appraising the online presence of health-related organizations who are serving a specific population or consumer demographic.
- develop skills related to synthesizing, organizing and reporting on the efficacy of an online technology to reach its intended population based on course content.

Assignment Process:

- During class two (Week 2), a small group charter will be developed by each group and posted to Sakai/FanshaweOnline. This group guideline document will detail how each small group plans to work together effectively to complete the assignment, roles to be undertaken by each group member (e.g. recorder, coordinator), how conflict will be resolved within the group, and basic expectations of each participant.
- At regular intervals over the semester (starting likely around Week 4) time will be set aside for groups to conduct their facilitation to the class. A schedule of groups will be predetermined early in the semester in order to afford groups enough time to preplan their facilitation.
Criteria for evaluation:

- Scholarly writing and use APA (6th ed.) formatting, referencing, and presentation
- Use of evidence-informed literature and other sources of knowledge to justify direction, approach, and outcomes
- Analysis related to the consumer population they are attempting to serve
- Determination of consumer population(s) and subsequent analysis of the development of targeted strategies to assist knowledge translation with this population(s)
- Development of a facilitation and related presentation that could be hypothetically presented to the organization
- Facilitation length, 15-25 minutes.
- **Due date:** Weekly basis – schedule to be set in the first few weeks of class
- **Grade:** 20% (Please see the marking rubric for this assignment for further guidance)

3. Reading reflections

The reading reflection component will require students to submit a meaningful, 5-7 sentence paragraph reflection based on the week’s assigned readings, and, one thoughtful question of the content that could be asked to the class to generate discussion. This paragraph will be submitted via OWL (Western) or FanshaweOnline in advance of the beginning of your respective N2240/7064 class [see table below for site specific deadlines]. Reflections will be required for Weeks 3 - 12 (inclusive) material.

For the purposes of this reflection, please use the following prompts to help generate your response (but not limited to)

- what did the readings make you think about?
- how can this concept/construct apply to nursing?
- what was the most challenging part of the reading(s)?
- was/is there a new way to look at the information or ideas presented in the readings?
- how does the knowledge derived from the readings inform your current or future personal/professional activities?

Further instructions and expectations regarding the quality of reflections will be discussed in class, including the location for posting on Sakai or FanshaweOnline. **Each week reflection is worth 1% (1% x 10 weeks = 10% of overall grade).** Reflections developed by students that demonstrate critical reflection will constitute 1% of your final grade. Reflections developed by students that fail to demonstrate critical reflection and/or are extremely superficial or students who do not submit a reflection (or are late in submitting) will forfeit 1% of their grade for that given week.

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### Summary of Opportunities to Demonstrate Learning

<table>
<thead>
<tr>
<th>OPPORTUNITIES TO DEMONSTRATE LEARNING</th>
<th>COURSE GOAL(S) ADDRESS ED</th>
<th>VALUE</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning Portfolio 1, Week 4 submission</td>
<td>1-8</td>
<td>20%</td>
<td>Week 4 *by 23:59EST of Week 4’s class</td>
</tr>
<tr>
<td>2. Learning Portfolio 2, Week 8 submission</td>
<td>1-8</td>
<td>35%</td>
<td>Week 8 *by 23:59EST of Week 8’s class</td>
</tr>
<tr>
<td>3. Learning Portfolio 3, Week 12 delivery</td>
<td>1-8</td>
<td>15%</td>
<td>Week 12</td>
</tr>
<tr>
<td>4. Health Organization Online Presence Facilitation</td>
<td>1-4, 8</td>
<td>20%</td>
<td>Weekly – predetermined for each group</td>
</tr>
<tr>
<td>5. Reading reflections</td>
<td>1-8</td>
<td>10%</td>
<td>Western: By 2pm on the day in advance of class Fanshawe: By 10am on Thursdays in advance of each class</td>
</tr>
</tbody>
</table>

### Policies

All policies related to assignments are in the Undergraduate BScN Programs Manual on the Western web site at owl.uwo.ca and on the Fanshawe College web site in the Program manual located in the Virtual Home Room at www.fanshawecollege.ca

### Attendance

Due to the significance of theoretical and practice knowledge in developing professional competence, students are expected to demonstrate professional responsibility through regular attendance at, and participation in, all scheduled learning activities. Much of the learning that takes place in this course is a result of preparation and engagement with the material, and active dialogue with colleagues and faculty.

### Scholarly Requirements

*The Western-Fanshawe Collaborative BScN Program N2240/NRS 7064 Introduction to Health Informatics within Nursing, 2016-2017*
In this program, scholarly writing is a requirement. Therefore, all scholarly papers will follow the sixth edition of the Publication manual of the American Psychological Association (2010), which includes guidelines for both content and format. In addition, all other writing will follow APA (revised 6th ed.) format when citing or referring to an author’s work or ideas. Failure to do so is unethical and is plagiarism.

**Plagiarism**

Student work is expected to be original. Plagiarism is a serious academic offence and could lead to your expulsion from the nursing program. You are plagiarizing if you insert a phrase, sentence or paragraph taken directly from another author without acknowledging that the work belongs to him/her. Similarly, you are plagiarizing if you paraphrase or summarize another author’s ideas without acknowledging that the ideas belong to someone else. All papers must be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University and the College for the detection of plagiarism. All papers submitted will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University, Fanshawe College, and Turnitin.com (www.turnitin.com). For further information, please see the BScN Program Manual for the policy on plagiarism. Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following web site(s):

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

http://www.fanshawec.ca/sites/default/files/assets/policies/pdf/2g04.pdf

**Assignments and Exams**

Please refer Undergraduate Programs Manual for information on penalties for late assignments, re-grading of assignments, and the protocol for missed mid-term or final exams. Western at owl.uwo.ca and Fanshawe in Virtual Home Room www.fanshaweonline.ca

**Electronic devices**

Electronic devices are useful in assisting with the teaching/learning process in both classroom and professional practice settings. In the classroom or praxis setting, devices should be used in a manner that is not distracting to others or oneself. In professional practice placement settings, please abide by the policies set by the agency in regards to use of social media, internet, and handheld devices. Additionally, technology use in the presence of clients or agency staff may require explanation as to its use as part of professional practice (e.g., a drug guide on a smart phone).

It is essential that client privacy and confidentiality be maintained when using electronic devices. When students and Clinical Instructors (CIs) are communicating via electronic devices,
client information must not be included. Students and CIs are accountable for responsible use of electronic communication, this includes; using professional language, setting device to silent/vibrate mode in the practice setting, and refraining from personal communications when at their practice placement.

**Mental Health**

Students who are in emotional/mental distress should refer to the following links for a complete list of options about how to obtain help.

MentalHealth@Western [http://www.uwo.ca/uwocom/mentalhealth/](http://www.uwo.ca/uwocom/mentalhealth/)

Fanshawe College iCopeU [http://icopeu.com/fanshawe/home.html](http://icopeu.com/fanshawe/home.html)