Introduction to Health Informatics within Nursing

N2240F/G - NRSG7064

2023-2024

The Western-Fanshawe Collaborative/Compressed Time Frame BScN Program N2240/NRSG-7064
Introduction to Health Informatics within Nursing, 2023-2024

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Online, Asynchronous

Calendar Description:

This course will extend students' knowledge and skills related to information literacy and knowledge acquisition skills necessary for professional nursing practice. From a health equity lens, students will recognize how current trends in technology interface with clients' access to health in a digital space.

Prerequisite(s): Registration in Year 1 or 2 of the Western-Fanshawe Collaborative BScN program, or the Compressed Time Frame BScN program.
Extra Information: 3 lecture hours
Course weight: 0.50

Course Description:

In this course students are introduced to 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. Use information literacy knowledge and skill to critique and inform personal and professional practice.
2. Critique how information technology has shaped and will continue to shape nursing practice.
3. Explain the how the components of the socio-technological relationship that exists in the health care system impacts the nursing profession, client-centred health care teams and clients.
4. Critically reflect on how information technology influences health (care) issues including social justice.
5. Identify how the CNO Practice Standards and Guidelines related to information technology, client centred care and professional practice guide nursing practice.
6. Demonstrate how information technology is used in relation to the personal and professional context to develop the skill set required to establish a professional presence online.

National Nursing Entry-to-Practice Competencies (CNO, 2019) addressed in the course:

- Clinician: 1.1, 1.2, 1.4, 1.7, 1.21, 1.22
- Professional: 2.1-2.9, 2.12
- Communicator: 3.3, 3.5-3.8
- Collaborator: 4.1, 4.3, 4.4, 4.5
- Coordinator: 5.1, 5.4, 5.6,
- Leader: 6.2-6.5, 6.10, 6.11
- Advocate: 7.1, 7.6-7.14
- Educator: 8.2-8.5
- Scholar: 9.1-9.8

Required Textbook:

- There is no textbook required for this course.

Recommended Resources:

- Resources to supplement course content will be outlined in the weekly learning activities.

Online Proctoring

Tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca

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Weekly Course Schedule

Week	Date	Topic	Assessment/ Evaluation
1	Sept 11	Course Introduction: What is Health Informatics?	
2	Sept 18	Ethical Practice & A Virtual Healthcare World	Online Discussion #1
3	Sept 25	Evidence-Informed Practice and Informatics: Information and Misinformation	Proctortrack Onboarding Quiz
4	Oct 2	Electronic Health Technologies I: Foundational Concepts	Mini Online Quiz
5	Oct 10*	Electronic Health Technologies II: Challenges and Opportunities	
6	Oct 16	Emerging Technologies I: Artificial Intelligence	Mini Online Quiz
7	Oct 23	Emerging Technologies II: Automation and Robotics	Group Case Study/ Essay Assignment
8	Oct 30	Reading Week (Oct 30-Nov 5)	
9	Nov 6	Technology-Enabled Models of Care	Mini Online Quiz
10	Nov 13	Digital Health & Policy	Mini Online Quiz
11	Nov 20	Digital Health & Social Justice	Online Discussion #2
12	Nov 27	New Roles and Future Directions for Nurses in Health Informatics	
13	Dec 4	Concepts Review and Consultation	Integrative Reflective Scholarly Paper (Dec 7)

Methods of Evaluation

1. **Online Asynchronous Forum Discussions (10% Total; 5% each)**
   Due: Week 2 and Week 11

   Students will participate in an online asynchronous forum discussion during two (2) separate time points in this course. During each of the online forum discussions, each student will generate and post on the forum within their pre-determined groups. Students must participate and post on the forum for each of the online discussions by Sunday at 11:55pm (Week 2 and Week 11). All forum discussion posts will be reviewed for completion and evaluated by the course instructor/course TA.

   Online Discussion #1: Week 2 (5%)
   By the end of week 2, students will join their pre-determined groups on the forum and:

   a) Individually post a self-introduction to other members of the group; and
   b) In consultation with other group members, develop and post a group charter outlining the expectations of group work in anticipation of the Group Case Study/Essay Assignment for this course.

   Online Discussion #2: Week 11 (5%)

   By the end of week 11; students will join their pre-determined groups on the forum and:

   a) Individually generate and respond to the questions/prompts that will be posed by the course instructor. The questions/prompts will be made available to students and will reflect the weekly content for week 11.

2. **Proctortrack Onboarding Quiz (5%)**
   Due: Week 3 - October 1, 2023 at 11:55pm

   As remote proctoring will be required in this course for the weekly online quizzes**, each student must onboard in Proctortrack** located on the course site, **to create a profile,** and **complete the Onboarding Quiz by Sunday, October 1 at 11:55pm**.This process will ensure Proctortrack is compatible with your computer and provide an opportunity for you to become familiar with the testing environment. Once the onboarding quiz has been uploaded and processed, your profile is created. This profile is used to verify your identity for each assessment. Students who have previously completed the onboarding process for evaluations in other course(s) must also complete the onboarding process and quiz for this course to receive credit. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca

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3. **Mini Online Quizzes (20% Total; 5% each)**
   Due: By the end of Weeks 4, 6, 9, 10

   Students will complete four (4) mini online quizzes which are distributed across the term, and the quiz questions will be based on the corresponding weekly learning activities (e.g, assigned readings, resources, content, and lecture video). The mini online quizzes will take place on Weeks 4, 6, 9, & 10 and each quiz will be made available to students via Proctortrack at the beginning of the assigned week on Monday at 12AM.

   With the support of Proctortrack, students will complete each of the online quizzes independently by the end of the week on Sunday at 11:55 pm.

4. **Group Case Study/Essay Assignment (30%)**
   Due: Week 7 - October 29, 2023 at 11:55 pm.

   Students will work collaboratively in their pre-assigned group to prepare and submit a Group Case Study/Essay Assignment. The assignment will include responding to questions/prompts pertaining to course material from weeks 1 – 6 inclusive, as well as a case study. It is expected that all answers and responses made in this assignment are informed by <u>evidence found in the literature and</u> cited following APA (7th Ed.) guidelines. All group members are expected to equally contribute in ways outlined in the group charter that will be developed as part of the online discussion in Week 2. Additional information regarding the assignment along with further instructions will be made available to students by Week 5.

5. **Integrative Reflective Scholarly Paper (35%)**
   Due: Week 13 - December 7, 2023 at 11:55 pm

   The Integrative Reflective Scholar Paper is an assignment that enables students to critically reflect on their key learnings from concepts and content that were explored, critiqued, discussed, and applied during the course. By the end of this course, each student will **independently** submit an integrative reflective scholarly paper which provides an opportunity for students to identify/select **two concepts** presented in this course, and to subsequently discuss, integrate, and reflect upon the concepts in a scholarly fashion. Scholarly writing, including the use of scholarly literature to support the discussion and reflection of the identified concepts is required. Additional information including instructions, criteria for evaluation/rubric will also be made available during the course.

   Criteria for Evaluation Include:
   - Scholarly writing and use APA (7th ed.) formatting and referencing
   - Identify/select **two course concepts**, and subsequently discuss, integrate, and reflect on the selected concepts throughout the paper
   - Integration of a minimum of 10 scholarly sources (beyond course literature and assigned readings) to support your discussion and reflection throughout the paper
   - Maximum word count: 1500 Words (excluding title page, tables/charts, references, and appendices)
   - Submission format: Microsoft Word only (other formats will not be accepted)
   - Naming of File: LastnameFirstname_N2240_Final Paper
   - Example of File Name: SmithGeorge_N2240_Final Paper

Summary of Methods of Evaluation

Method of Evaluation	Percentage of Course Grade	Due Date

1. Online Asynchronous Forum Discussions
    ▪ Discussion 1: Week 2
    ▪ Discussion 2: Week 11
    ▪ 5% per discussion
	10%	Weeks 2 & 11

2. Proctortrack Onboarding Quiz	5%	Week 3
3. Mini Online Quizzes ▪ 5% per quiz x 4	20%	Weeks 4, 6, 9, & 10
4. Group Case Study/Essay Assignment	30%	Week 7
5. Integrative Reflective Scholarly Paper (Individual)	35%	Week 13
Total	**100%**	

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Course Policies and Procedures

Statement on Prerequisite Checking
Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the necessary prerequisites.

Academic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, in the Academic Calendar (westerncalendar.uwo.ca).

Assignments and Exams
All policies related to assignments are in the Undergraduate BScN Programs Manual on the Undergraduate Student Information site. Please refer to the Undergraduate Programs Manual for information on penalties for late assignments, re-grading of assignments, and the protocol for missed mid-term or final exams. Marks will be deducted from late assignments according to the policy in the Programs Manual.

Online Proctoring
Tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca

Use of Statistical Pattern Recognition on Multiple Choice Exams
Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Scholarly Writing
All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking 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 The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Plagiarism
Student work is expected to be original. Plagiarism is a serious academic offence and could lead to a zero on the assignment in question, a zero in this course, or your expulsion from the university. 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 may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University 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 and Turnitin.com (www.turnitin.com).

Statement Regarding the Use of Artificial Intelligence
Within this course, students are permitted to use AI tools exclusively for information gathering and preliminary research purposes. These tools are intended to enhance the learning experience by providing access to diverse information sources. However, it is essential that students critically evaluate the obtained information, exercise independent thinking, and engage in original research to synthesize and develop their own ideas, arguments, and perspectives. The use of AI tools can serve as a starting point for exploration, with students expected to uphold academic integrity by appropriately attributing all sources and avoiding plagiarism. Assignments and/or lab reports should reflect the student's own thoughts and independent written work. By adhering to these guidelines, students contribute to a responsible and ethical learning environment that promotes critical thinking, independent inquiry and allows them to produce original written contributions.

While use of AI-based content creating platforms (e.g., ChatGPT) can be useful to assist in information collection and problem-solving of complex scenarios, outputs generated from these platforms need to be attributed in terms of direct citation/quote and referencing (APA, 2020, 7th ed.), if used in assignments or course participation. In other words, AI-generated content, while interesting and potentially informative to assist in the refinement of ideas and insights, should not be used verbatim or suggested to be original content generated by student(s) for assignments in this course. If outputs from AI-based content creating platforms are used verbatim, they must be attributed and cited accordingly.

Re-submission of Previously Graded Material
Without the explicit written permission of the instructor, you may not submit any academic work for which credit has been obtained previously, or for which credit is being sought, in another course or program of study in the University or elsewhere.

School of Nursing Updated Policy on Review of Graded Assignments
After a graded assignment is returned, a student's first step is to take time to reflect on the assignment description in the syllabus, on the feedback provided by the original marker within the assignment, and on the marking rubric. If a student cannot understand the meaning or intent behind the feedback received, they may submit a written request to the original marker for an informal consultation to review the assignment grade. The request must include documentation of grounds, based on the marker's feedback, to support the assignment review. An assignment will not be reviewed simply because a student is unhappy with the grade received, or they believe the mark does not reflect the effort they put into completing the assignment. Students who need assistance with their writing skills should contact on-campus resources for support.

Academic Considerations and Absences from Lectures and Assessments

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request (in writing) any necessary academic considerations at least two weeks prior to the holiday to the academic advisors in their Home Department. Additional information is provided in the [Western Multicultural Calendar.](#)

Academic Accommodation

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. Students with ongoing accommodation needs within this course are also encouraged to contact [Accessible Education](#), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found [here](#).

Academic Consideration

The University recognizes that a student's ability to meet their academic responsibilities may, on occasion, be impaired by extenuating circumstances that are medical or compassionate in nature. These extenuating circumstances may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. In all cases, students are advised to consult with the academic advisors in their home units, at their earliest opportunity. Academic advisors may refer students to [Accessible Education](#) for ongoing academic accommodations.

Most forms of academic consideration require documentation, and this documentation is to be submitted to academic advisors within five (5) business days of their return to academic responsibilities. Any such documents will be retained in the student's file, and will be held in confidence in accordance with the University's [Official Student Record Information Privacy Policy](#). Once the petition and supporting documents have been received and assessed, appropriate academic considerations shall be determined by academic advising, in consultation with the student's instructor(s). Academic considerations may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty. Academic considerations shall be granted only where the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete their academic responsibilities. (Note – it will not be sufficient to provide documentation indicating simply that the student "was seen for a medical reason" or "was ill.").

Whenever possible, students who require academic considerations should provide notification and documentation in advance of due dates, examinations, etc. Under no circumstances are students expected to submit rationales for (or documentation of) any absences, to course instructors. Students are, however, required to follow-up with course instructors, in a timely fashion, to identify the ways in which the academic consideration will be implemented.

During Lectures and Tutorials
Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. **Unless <u>explicitly</u> noted otherwise, you may <u>not</u> make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.**

Statement on Use of Electronic Devices (where applicable)
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.

Student Attendance, Participation, and Engagement
Due to the significance of theoretical and practice knowledge in developing professional competence, students are expected to demonstrate professional responsibility through regular attendance, participation, and engagement in all scheduled learning activities (including but not limited to synchronous activities, group work/meetings, and assessments). Much of the learning that takes place is a result of preparation and engagement with the material and active engagement with colleagues and faculty.

Examination Conflicts
A student completing tests or examinations with flexible submission times (e.g., where one or more evaluation is a take-home assessment) cannot request alternative arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time within the window specified by the instructor. This applies to direct conflicts as well as "heavy load" conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request academic considerations with their academic advising unit prior to the deadline to drop a course without academic penalty In the case of online tests and examinations, use of a "Conflict Room," wherein student can write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.

During Exams
Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices during ANY tests, quizzes, midterms, examinations, or other in-class evaluations.

Final Exams
Do not book personal/travel plans until the FINAL exam schedule is posted for the term. Students who fail to appear for the final examination at the time set need to obtain permission to write the missed exam. Permission may be granted only based on compassionate or medical grounds with appropriate supporting documents.

Mental Health and Support Services
Students who are in emotional/mental distress should refer to MentalHealth@Western
http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain
help.

Student Safety
Please refer to the Undergraduate BScN Programs Manual section on Student Safety Concerns:
Guidelines for Responding in the Practice Setting Environment and the Student Safety Flow
Chart found on the Undergraduate Programs site at owl.uwo.ca, or Fanshawe, Safe College
Campus, 2008 www.fanshawec.ca/assets/policies/pdf/1d05.pdf

Learning Skills Services
The Student Development Centre at Western University provides free support for all students to
strengthen their skills and improve or maintain their academic performance. The focus is on
helping students learn and study more effectively so that they can achieve their academic goals.
You can find out more about this service at www.sdc.uwo.ca/learning

Accessibility & Learning Skills Services
Western University is committed to recognizing the dignity and independence of all students and
seeks to ensure open and unhindered access to academic activities. Course instructors are
committed to providing accommodation and equitable access to all course resources and
experiences. Securing provisions for academic accommodation are a shared responsibility
between the student and the University. You may wish to contact Student Accessibility Services
at (519) 661-2147 or ssd@uwo.ca or visit their website at http://www.sdc.uwo.ca/ssd/

If you are a student with a disability and require extra time accommodation, please ensure your
accommodations are active on the Accommodated Exams website
https://studentservices.uwo.ca/Accommodatedexamssignup/ for this course at least 10 days
before the assessment. Any accommodations posted there will be applied to your assessment(s).

Inclusivity
Course instructors are dedicated to including a range of perspectives and content during shared
learning experiences within this course. Together with you, course instructors aim to co-create a
classroom/learning atmosphere where we welcome and respect a multitude of views and
perspectives. As a result, course instructors will create space that may challenge our prior beliefs
but supports inclusivity and respect for all participants.

Land Acknowledgment
Western University is currently located on the traditional lands of the Attawandaron people (also
known as the Neutral) and is in the middle of Southwestern Ontario. First Nations surrounding
the university are: Chippewas of the Thames First Nation, the Oneida Nation of the Thames, and
the Munsee Delaware Nation. It is important to recognize and acknowledge the relationship that
Indigenous peoples have with the land and to respect the continuing presence as well as the
commitment to reconciliation.

Writing Support Centre - Western Site
http://writing.uwo.ca/

The Learning Centre - Fanshawe Site
https://www.fanshawec.ca/student-life/student-services/learning-centre/english-services

If, after the assignment review, a student still believes they have grounds with supporting documentation their grade was unfairly calculated, they may request a formal appeal of the grade in accordance with the policy for academic appeals.

Western Site: Undergraduate Student Academic Appeal
https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading_178

Fanshawe Site: Policy A128: Student Appeals
https://www.fanshawec.ca/sites/default/files/legacy/oldfanshawe/sites/default/files/assets/policies/pdf/a128.pdf

Office of the Ombudsperson - Western Site
https://www.uwo.ca/ombuds/

Fanshawe Student Union Advocacy and Communications Coordinator
www.fsu.com

Office of the Ombudsperson - Fanshawe Site:
https://www.fanshawec.ca/student-life/student-services/welcome-office-ombuds

Review of Graded Assignments

Further details about this process provided in 'expanded description'

Return of graded assignment → Reflect for a minimum of 48 hours on feedback

Need help interpreting feedback? Submit written request to meet with original marker

Resolution reached?
- YES → No further action
- NO → **Submit written request to meet with course professor**

Resolution Reached?
- YES → No further action
- NO → **Launch Formal Appeal**

Launch Formal Appeal
- **Appeal granted** → Grade may increase, stay the same, or decrease → **Resolution Reached?**
  - YES → No further action
  - NO → Proceed to next level of formal appeal
- **Appeal denied** → No further action OR → Proceed to next level of formal appeal