



## **Introduction to Health Informatics within Nursing**

**N2240F/G - NRS7064**

**Winter 2024**

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## **Introduction to Health Informatics within Nursing**

**N2240F/G NRS7064**

**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.

### **Expanded 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 Weight & Delivery:** 0.50, asynchronous online

**Prerequisite(s):** Registration in Year 1 of the Western-Fanshawe Collaborative BScN program, or the Compressed Time Frame BScN program.

### **Course Learning Outcomes:**

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.

**Entry-to-Practice Competencies for Registered Nurses (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

**Course Materials:**

**Required:**

- There is no textbook required for this course.
- Resources/readings will be outlined in the weekly learning activities and posted on the course site.

**Recommended Resources:**

American Psychological Association. (2020). *Publication manual of the American Psychological Association*. (7th ed.). Washington, DC: American Psychological Association.

**Methods of Evaluation**

Method of Evaluation	Percentage of Course Grade	Due Date
1. Online Asynchronous Forum Discussions <ul style="list-style-type: none"> <li>▪ Discussion 1: Week 2</li> <li>▪ Discussion 2: Week 11</li> <li>▪ 5% per discussion</li> </ul>	10%	Weeks 2 & 11
2. Mini Online Quizzes <ul style="list-style-type: none"> <li>▪ 5% per quiz x 4</li> </ul>	20%	Weeks 4, 6, 9, & 10
3. Group Case Study/Essay Assignment	35%	Week 8
4. Integrative Reflective Scholarly Paper (Individual)	35%	Week 13
<b>Total</b>	<b>100%</b>	

**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. 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 the Tests & Quizzes tool on the online learning platform (e.g. OWL at Western, FOL at Fanshaw) at the beginning of the assigned week on Monday at 12AM.

Students will complete each of the online quizzes independently by the end of the week on Sunday at 11:55 pm.

**3. Group Case Study/Essay Assignment (35%)**  
**Due: Week 8 – March 3, 2024, 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 evidence found in the literature and cited following APA (7<sup>th</sup> 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.

#### **4. Integrative Reflective Scholarly Paper (35%)**

**Due: Week 13 - April 5, 2024, 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 6 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

## Weekly Class Schedule

Week	Date	Topic	Assessment/ Evaluation
1	Jan 8	Course Introduction: What is Health Informatics?	
2	Jan 15	Ethical Practice & A Virtual Healthcare World	Online Discussion #1
3	Jan 22	Evidence-Informed Practice and Informatics: Information and Misinformation	
4	Jan 29	Electronic Health Technologies I: Foundational Concepts	Mini Online Quiz
5	Feb 5	Electronic Health Technologies II: Challenges and Opportunities	
6	Feb 12	Emerging Technologies I: Artificial Intelligence	Mini Online Quiz
7	Feb 19	Reading Week (Feb 17- 25)	
8	Feb 26	Emerging Technologies II: Automation and Robotics	Group Case Study/ Essay Assignment
9	March 4	Technology-Enabled Models of Care	Mini Online Quiz
10	March 11	Digital Health & Policy	Mini Online Quiz
11	March 18	Digital Health & Social Justice	Online Discussion #2
12	March 25	New Roles and Future Directions for Nurses in Health Informatics	
13	April 1	Concepts Review and Consultation	Integrative Reflective Scholarly Paper (April 5, 2024)

## Course Policies and Procedures

### Undergraduate Program Site

All students are required to visit the Undergraduate Program Site and be familiar with its contents. The Undergraduate Program Manual and full list of School of Nursing Policies can be accessed:

#### Fanshawe:

Under content on the Collaborative Nursing Program Homeroom site (NSG3-HR) on Fanshaweonline/FOL here (requires login to FOL):

Program Manual:

<https://www.fanshaweonline.ca/d21/le/content/101482/viewContent/12227152/View>

School of Nursing Policies:

<https://www.fanshaweonline.ca/d21/le/content/101482/viewContent/13885634/View>

#### Western:

Requires login with UWO username and password:

<https://uwoca.sharepoint.com/sites/NursingUndergraduateInformation?e=1%3A9bcb11eb675d42f1867e859267a302ae&CT=1690304572539&OR=OWA-NT&CID=d6022dc4-883c-f129-18eb-4f2f5576da36>

### Attendance

Students are expected to demonstrate professional responsibility through regular attendance at, and participation in, all course learning activities. Much of the learning that takes place is a result of preparation and engagement with the material, as well as active dialogue with colleagues and faculty. Students are expected to organize their schedules such that weekly preparation for class is completed, and classes are attended, with consistency.

### Scholarly Requirements

All scholarly writing will follow the 7<sup>th</sup> edition of the *Publication manual of the American Psychological Association* (2020). All other types of writing will follow APA (7<sup>th</sup> ed.) format when citing or referencing another 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 and appropriately citing the author to whom the work belongs. You are plagiarizing if you paraphrase or summarize another author's ideas without acknowledging that the ideas belong to them. You are plagiarizing if you present your own work, otherwise used for other course(s)/purposes, as original material in current course work. At the discretion of the instructor, you may be required to submit your work through **Turnitin.com** to verify originality **and are responsible for acting on the report generated**. For further information, please see the BScN Program Manual for the academic policy on plagiarism.

## **Artificial Intelligence (AI)**

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.

## **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. Please see flow chart at the end of the syllabus.

Students who need assistance with their writing skills should contact on-campus resources for support:

Fanshawe (select Fanshawe Library Learning Commons):

<https://www.fanshawec.ca/students/support/academic-support>

Western: (<http://writing.uwo.ca/>)



If, after the assignment review, a student still believes they have grounds with supporting documentation that their grade was unfairly calculated, they may request a formal appeal of the grade in accordance with the policy for academic appeals (<https://www.uwo.ca/ombuds/> or <http://www.fanshawec.ca/appeals>).

## Course correspondence

To maintain the confidentiality of correspondence between students and course professor and/or Teaching Assistant(s), all electronic correspondence must take place within the course site on OWL (Western site students) or Fanshawe online (FOL – Fanshawe site). DO NOT send emails through the regular email system. You are expected to check the course site regularly for any messages/announcements posted by the course professor and/or Teaching Assistant(s).

## 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 about 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).

**Unless explicitly noted otherwise, you may not 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.**

## 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](http://owl.uwo.ca) and Fanshawe in Virtual Home Room [www.fanshaweonline.ca](http://www.fanshaweonline.ca)

## 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>.

## 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.

### **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](mailto: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).

### **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.

### **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.

### **Social Media**

It is a breach of privacy and confidentiality, and highly unprofessional, to post information on any social media platform about:

- Peers
- Class activities/discussion
- Clients
- Agencies
- Laboratories
- Simulations
- Communications with professors

Students will be reported to the Associate Director (Western) or Associate Dean (Fanshawe). Such behaviour may compromise a student's standing in the program.

### **Mental Health and Support Services**

Students who are in emotional/mental distress should refer to [MentalHealth@Western](mailto:MentalHealth@Western) <http://www.uwo.ca/uwocom/mentalhealth/> or Fanshawe Health and Wellness

<https://www.fanshawec.ca/students/support/health-wellness/counselling> for a complete list of options for obtaining 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](http://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](http://www.sdc.uwo.ca/learning)

### **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>

### **Western Site: Undergraduate Student Academic Appeal**

[https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading\\_178](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](http://www.fsu.com)

### **Office of the Ombudsperson - Fanshawe Site:**

<https://www.fanshawec.ca/student-life/student-services/welcome-office-ombuds>

### **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.

