



## COURSE OUTLINE: BSCN2002 - HEALTH INFORMATICS

Prepared: Jennifer Flood

Approved: Bob Chapman, Dean, Health

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| <b>Course Code: Title</b>   | BSCN2002: HEALTHCARE INFORMATICS  |
| <b>Program Number: Name</b>   | 3401: HONOURS BSCN  |
| <b>Department:</b>  | BSCN - NURSING  |
| <b>Academic Year:</b>   | 2024-2025   |
| <b>Course Description:</b>  | This course addresses the integration of nursing practice with health information, knowledge, data management and communication technologies to promote best practice strategies for quality health of individuals, families and other groups, and communities worldwide (Canadian Nursing Informatics Association [CNIA], 2017). Through this introductory course, student will learn about the influence of information technology on clinical practice and explore methods of incorporating informatics into practice. |
| <b>Total Credits:</b>   | 2   |
| <b>Hours/Week:</b>  | 2   |
| <b>Total Hours:</b>   | 2   |
| <b>Prerequisites:</b>   | There are no pre-requisites for this course.  |
| <b>Corequisites:</b>  | There are no co-requisites for this course.   |
| <b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>                         | <b>3401 - HONOURS BSCN</b>  |
| Please refer to program web page for a complete listing of program outcomes where applicable. | VLO 1 Meet professional practice requirements as identified in the current Entry-to-Practice Competencies and Professional Standards of the College of Nurses of Ontario.   |
|   | VLO 2 Provide safe, competent, holistic care to diverse individuals, groups and populations in a variety of contexts based on the principles of nursing knowledge, ways of knowing, ethics, relationships, and cultural safety.   |
|   | VLO 3 Build professional relationships in a collaborative environment with other health care providers and actively engage in collaborative decision making around client care.   |
|   | VLO 4 Contribute to the nursing profession and healthcare through the practice of critical inquiry, self-reflection, and a commitment to professional growth through lifelong learning.   |
|   | VLO 5 Utilize critical thinking and reasoning to make evidence-informed clinical judgements.  |
|   | VLO 7 Utilize available technologies to communicate, educate, and provide appropriate care in a variety of contexts.  |
|   | VLO 9 Practice in a broad range of settings, with an emphasis on rural communities.   |
| VLO 11 Identify, support, and effect appropriate change in healthcare.                        |   |
| <b>Essential Employability Skills (EES) addressed in this course:</b>                         | EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.   |
|   | EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.  |



- EES 4 Apply a systematic approach to solve problems.
- EES 5 Use a variety of thinking skills to anticipate and solve problems.
- EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
- EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
- EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.
- EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
- EES 10 Manage the use of time and other resources to complete projects.
- EES 11 Take responsibility for ones own actions, decisions, and consequences.

**Course Evaluation:**

Passing Grade: 65%,

A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.

**Other Course Evaluation & Assessment Requirements:**

Important note about course evaluation:  
 Successful completion of this course is dependent on all assignments being completed and submitted.  
 ETPs: 2.4, 2.8, 3.6, 8.5, 9.4, 9.5

**Books and Required Resources:**

Introduction to Health Informatics, Second Edition by El Morr  
 Publisher: Canadian Scholars Edition: 2nd  
 ISBN: 9781773383538

**Course Outcomes and Learning Objectives:**

| <b>Course Outcome 1</b>   | <b>Learning Objectives for Course Outcome 1</b>   |
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| <p>Upon successful completion of this course, the student will demonstrate the ability to:</p> <p>Comprehend the influence of information technology in modern clinical practice and the expectation of the nursing role.</p> | <ul style="list-style-type: none"> <li>a. Discuss the history of nursing informatics and its evolution</li> <li>b. Discuss the integration of informatics into healthcare and utilization by nurses</li> <li>c. Identify various health informatic systems and explain differences among them</li> <li>d. Identify competencies needed by nursing informaticists</li> <li>e. Describe the various types of electronic records used across the continuum of care (e.g., EHR, EMR, PHR, etc.) and their clinical and administrative uses</li> <li>f. Discuss the future of nursing informatics and evolving technologies</li> </ul> |
| <b>Course Outcome 2</b>   | <b>Learning Objectives for Course Outcome 2</b>   |
| <p>Explain the importance of information standardization and the critical role of nursing in collecting and documenting accurate data.</p>  | <ul style="list-style-type: none"> <li>a. Articulate how informatics can be used to support and evidence-informed nursing practice, advance nursing knowledge, and contribute to the value and understanding of nursing</li> <li>b. Describe the processes of data gathering, recording, and retrieval, and identify potential informational risks, gaps, and inconsistencies and the impact of</li> <li>c. Discuss how information and communication technologies can assist nurses within their practice to meet standards</li> </ul>   |



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|  | <p>d. Discuss simulation fidelity and its meaning</p> <p>e. Develop understanding of what geographic information system (GIS) can be used for and what information must be obtained</p>   |
| <b>Course Outcome 3</b>  | <b>Learning Objectives for Course Outcome 3</b>   |
| Demonstrate the different purposes of information technology and challenges faced in northern and rural areas.                       | <p>a. Discuss the benefits and challenges of utilization of information and communication technologies within northern and rural areas</p> <p>b. Explore and apply geographic information system (GIS) to the nursing profession</p> <p>c. Recognize how information technology can be expanded upon to support healthcare in northern and rural areas</p> <p>d. Discuss cultural considerations to implementation of information technology</p>  |
| <b>Course Outcome 4</b>  | <b>Learning Objectives for Course Outcome 4</b>   |
| Understand the impact of consumer informatics on clinical practice.  | <p>a. Discuss consumer informatics and its definition</p> <p>b. Describe how consumer health informatics are utilized within healthcare systems</p> <p>c. Discuss the application of consumer health informatics and the benefits to nursing</p> <p>d. Describe what artificial intelligence is and how it can apply to nursing practice</p>  |
| <b>Course Outcome 5</b>  | <b>Learning Objectives for Course Outcome 5</b>   |
| Explore and demonstrate the methods of and challenges with implementing information technology.                                      | <p>a. Discuss benefits and barriers of informatics application</p> <p>b. Discuss key legal and ethical challenges within healthcare</p> <p>c. Discuss benefits and barriers of Electronic Health Records within Ontario and Canada</p> <p>d. Discuss the benefits and barriers of evolving informatics</p> <p>e. Reflect on the importance of legal and regulatory requirements, ethical standards, and organizational policies and procedures in relation to nursing informatics</p> <p>f. Recognize the importance of nurses' involvement in the design, selection, implementation, and evaluation of applications and systems in healthcare.</p> |
| <b>Course Outcome 6</b>  | <b>Learning Objectives for Course Outcome 6</b>   |
| Discuss the utility of social media within the contexts of consumer health information, client education, and professional practice. | <p>a. Illustrate the interconnection between social media and informatics</p> <p>b. Discuss the benefits of barriers to social media within nursing and healthcare</p> <p>c. Describe public health informatics and its meaning</p> <p>d. Discuss how social media is used within public health</p> <p>e. Explain public health principles in Canada</p>  |
| <b>Course Outcome 7</b>  | <b>Learning Objectives for Course Outcome 7</b>   |
| Explain the need for protection of privacy, confidentiality, and security in the collection and use of health information.           | <p>a. Discuss privacy issues in relation to information technology and personal health information</p> <p>b. Demonstrate an awareness in regards to the College of Nurses of Ontario (CNO) guidelines regarding privacy and confidentiality</p>   |



