



COURSE OUTLINE: HCA112 - HEALTH INFORMATICS

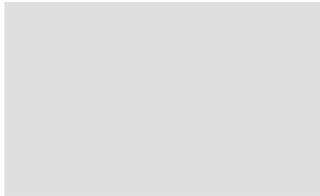
Prepared: Theresa Mudge, BSc, MHA

Approved: Bob Chapman - Dean

Course Code: Title	HCA112: HEALTH INFORMATICS
Program Number: Name	2186: HEALTH CARE ADMIN
Department:	BUSINESS/ACCOUNTING PROGRAMS
Academic Year:	2025-2026
Course Description:	This course introduces students to the field of health informatics with an emphasis on data-driven decision-making in health care leadership and administration. Students will examine the evolution of health information systems and emerging technologies such as artificial intelligence (AI) that support clinical, operational, and policy development. A significant focus is placed on population health, data governance, and analytics as tools to improve health outcomes and resource allocation. As part of the course, students will develop a population health profile using relevant data sources to inform planning and decision-making within a health care or community context.
Total Credits:	3
Hours/Week:	3
Total Hours:	42
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	HCL401
Vocational Learning Outcomes (VLO's) addressed in this course:	2186 - HEALTH CARE ADMIN
Please refer to program web page for a complete listing of program outcomes where applicable.	VLO 1 Address the needs of a diverse patient population using best practices to ensure progressive and positive processes within a health care facility.
	VLO 3 Utilize progressive, professional leadership concepts while working within an interprofessional health care team.
	VLO 6 Utilize health care technology and informatics for the benefit of the patients and support of the institution.
	VLO 7 Support evidence informed decision making, using critical thinking skills and best practices in the administration of a healthcare facility.
Essential Employability Skills (EES) addressed in this course:	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 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.																
Course Evaluation:	<p>Passing Grade: 50%, D</p> <p>A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.</p>																
Books and Required Resources:	<p>Introduction to Health Informatics: A Canadian Perspective by Christo El Morr Publisher: Canadian Scholars Edition: Second, 2023 ISBN: 9781773383538 Print format</p> <p>Introduction to Health Informatics: A Canadian Perspective by Christo El Morr Publisher: Canadian Scholars Edition: Second, 2023 ISBN: 9781773383545 eBook format</p>																
Course Outcomes and Learning Objectives:	<table border="1"> <thead> <tr> <th>Course Outcome 1</th> <th>Learning Objectives for Course Outcome 1</th> </tr> </thead> <tbody> <tr> <td>Analyze the evolution and role of health informatics in enabling evidence-informed leadership in Canadian health care.</td> <td> 1.1 Describe the historical development and interdisciplinary foundations of health informatics. 1.2 Explain the relationship between informatics, health system transformation, and strategic decision-making. 1.3 Identify core competencies required for leadership in digital health environments. 1.4 Evaluate how electronic health records and digital platforms contribute to evidence-informed leadership and accountability. </td> </tr> <tr> <th>Course Outcome 2</th> <th>Learning Objectives for Course Outcome 2</th> </tr> <tr> <td>Apply knowledge of health information systems and data platforms to assess organizational and population health performance.</td> <td> 2.1 Distinguish between data, information, knowledge, and wisdom within a health system context. 2.2 Describe the function of clinical, administrative, and community-based information systems. 2.3 Interpret and synthesize data from national and local sources (e.g., CIHI, public health databases) to identify population health needs. 2.4 Complete a population health profile to support planning and service delivery decisions in a specified community or region. </td> </tr> <tr> <th>Course Outcome 3</th> <th>Learning Objectives for Course Outcome 3</th> </tr> <tr> <td>Evaluate data analytics and artificial intelligence (AI)-enabled technologies to support predictive and strategic planning in health care.</td> <td> 3.1 Assess how predictive analytics and AI tools inform service design, resource allocation, and risk identification. 3.2 Critically examine the ethical, practical, and leadership implications of using AI in population health management. </td> </tr> <tr> <th>Course Outcome 4</th> <th>Learning Objectives for Course Outcome 4</th> </tr> <tr> <td>Examine leadership</td> <td>4.1 Identify data governance structures, and cross-sector</td> </tr> </tbody> </table>	Course Outcome 1	Learning Objectives for Course Outcome 1	Analyze the evolution and role of health informatics in enabling evidence-informed leadership in Canadian health care.	1.1 Describe the historical development and interdisciplinary foundations of health informatics. 1.2 Explain the relationship between informatics, health system transformation, and strategic decision-making. 1.3 Identify core competencies required for leadership in digital health environments. 1.4 Evaluate how electronic health records and digital platforms contribute to evidence-informed leadership and accountability.	Course Outcome 2	Learning Objectives for Course Outcome 2	Apply knowledge of health information systems and data platforms to assess organizational and population health performance.	2.1 Distinguish between data, information, knowledge, and wisdom within a health system context. 2.2 Describe the function of clinical, administrative, and community-based information systems. 2.3 Interpret and synthesize data from national and local sources (e.g., CIHI, public health databases) to identify population health needs. 2.4 Complete a population health profile to support planning and service delivery decisions in a specified community or region.	Course Outcome 3	Learning Objectives for Course Outcome 3	Evaluate data analytics and artificial intelligence (AI)-enabled technologies to support predictive and strategic planning in health care.	3.1 Assess how predictive analytics and AI tools inform service design, resource allocation, and risk identification. 3.2 Critically examine the ethical, practical, and leadership implications of using AI in population health management.	Course Outcome 4	Learning Objectives for Course Outcome 4	Examine leadership	4.1 Identify data governance structures, and cross-sector
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strategies and governance mechanisms that support the effective use of health informatics to improve health system and population outcomes.

partnerships that enable informatics success.
 4.2 Evaluate how data is used to set priorities, measure impact, and support continuous improvement in population health.
 4.3 Propose informatics-driven strategies to address health disparities and support equitable access to care.
 4.4 Recommend evidence-based initiatives based on data from the population health profile and other sources.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	30%
Population Health Profile	30%
Tests / Quizzes	40%

Date:

August 19, 2025

Addendum:

Please refer to the course outline addendum on the Learning Management System for further information.

