



## COURSE OUTLINE: HIN204 - HEALTH I.T. & CLINIC

Prepared: Joshua McColeman

Approved: Corey Meunier, Chair, Technology and Skilled Trades

<b>Course Code: Title</b>	HIN204: HEALTH INFORMATICS TECH & CLINICAL PRACT
<b>Program Number: Name</b>	2197: HEALTH INFORMATICS
<b>Department:</b>	COMPUTER STUDIES
<b>Academic Year:</b>	2023-2024
<b>Course Description:</b>	This course will increase the understanding of health informatics and health information technology provincially, nationally, and globally. This course will also study the influence of digitization on clinical practice. In the realm of clinical practice, we will study the development of electronic health records, patient portals, mobile technologies, and other clinical tools. Students will be expected to research any new or evolving technologies and their impact on clinical practice, as well.
<b>Total Credits:</b>	3
<b>Hours/Week:</b>	3
<b>Total Hours:</b>	45
<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>2197 - HEALTH INFORMATICS</b>
Please refer to program web page for a complete listing of program outcomes where applicable.	VLO 1 Assess organizational requirements for health information system technologies (HIST).
	VLO 6 Synthesize relevant local, national and global health care and health information management issues, trends, and evolving technologies to support health information systems and processes.
<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 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 10 Manage the use of time and other resources to complete projects.
	EES 11 Take responsibility for ones own actions, decisions, and consequences.
<b>Course Evaluation:</b>	Passing Grade: 50%, D
	A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.



**Other Course Evaluation & Assessment Requirements:**

The student must pass both the lab and test portions of the course.

Students are expected to be present to write all tests in class, unless otherwise specified. If a student is unable to write a test due to illness or a legitimate emergency, that student must contact the professor prior to class and provide reasoning. Should the student fail to contact the professor, the student shall receive a grade of zero on the test.

If a student is not present 10 minutes after the test begins, the student will be considered absent and will not be given the privilege of writing the test.

Students exhibiting academic dishonesty during a test will receive an automatic zero. Please refer to the College Academic Dishonesty Policy for further information.

In order to qualify to write a missed test, the student shall have:

- a.) attended at least 75% of the classes to-date.
- b.) provide the professor an acceptable explanation for his/her absence.
- c.) be granted permission by the professor.

NOTE: The missed test that has met the above criteria will be an end-of-semester test.

Labs / assignments are due on the due-date indicated by the professor. Notice by the professor will be written on the labs / assignments and verbally announced in the class. Labs and assignments that are deemed late will have the following penalty: 1 day late - 10% reduction, 2 days late, 20% reduction, 3 days late, 30% reduction. After 3 days, no late assignments and labs will be accepted. It is the responsibility of the student who has missed a class to contact the professor immediately to obtain the lab / assignment. Students are responsible for doing their own work. Labs / assignments that are handed in and are deemed identical or near identical in content may constitute academic dishonesty and result in a zero grade.

Students are expected to be present to write in-classroom quizzes. There are no make-up options for missed in-class quizzes.

Students have the right to learn in an environment that is distraction-free, therefore, everyone is expected to arrive on-time in class. Should lectures become distracted due to students walking in late, the professor may deny entry until the 1st break period, which is 50 minutes into the class or until that component of the lecture is complete.

Grade  
Definition Grade Point Equivalent  
A+ 90 - 100% 4.00  
A 80 - 89%  
B 70 - 79% 3.00  
C 60 - 69% 2.00  
D 50 - 59% 1.00  
F (Fail) 49% and below 0.00

CR (Credit) Credit for diploma requirements has been awarded.

S Satisfactory achievement in field /clinical placement or non-graded subject area.

U Unsatisfactory achievement in field/clinical placement or non-graded subject area.

X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.

NR Grade not reported to Registrar's office.



W Student has withdrawn from the course without academic penalty.

**Books and Required Resources:**

Key Advances in Clinical Informatics by Aziz Sheikh  
 Publisher: Academic Press Edition: 2017  
 ISBN: 9780128095232

**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
Information systems in clinical practice.	1.1 Understand how clinical information systems are implemented and used within inpatient and outpatient settings. 1.2 Explain how electronic health records impact clinical practice. 1.3 Describe interoperability and the facilitating standards. 1.4 Explore threats and risk management techniques for privacy and security.
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
Clinical decision support and knowledge management.	2.1 Examine the state of clinical decision support and approaches to knowledge management. 2.2 Understand predictive analytics and population health. 2.3 Describe various technologies used for decision making. 2.4 Identify tools used to aid clinical practice.
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
Mobile, artificial intelligence, and wearable technology.	3.1 Describe various aspects of mobile health including the evidence supporting mobile health use and the accompanying issues. 3.2 Describe the challenges and benefits of cloud computing in healthcare. 3.3 Explore the role of machine learning in healthcare and electronic health records. 3.4 Explore patient portal and personal health record components. 3.5 Understand the role of social media and apps. 3.6 Explore the use of smartphones and wearables.

**Evaluation Process and Grading System:**

<b>Evaluation Type</b>	<b>Evaluation Weight</b>
Assignment 1	5%
Assignment 2	5%
Assignment 3	5%
Assignment 4	5%
Assignment 5	5%
Assignment 6	5%
Assignment 7	5%
Assignment 8	5%
Quiz 1	2%
Quiz 2	2%



	Quiz 3	2%
	Quiz 4	2%
	Quiz 5	2%
	Test 1	25%
	Test 2	25%

**Date:** August 11, 2023

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