COURSE OUTLINE: HIN202 - HEALTH DATA STANDARD

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Course Code: Title	HIN202: HEALTH DATA STANDARDS
Program Number: Name	2197: HEALTH INFORMATICS
Department:	COMPUTER STUDIES
Academic Year:	2025-2026
Course Description:	Students will learn the very important relationship between health data standards and health informatics. Learners will be expected to understand specific topics, such as: minimum data sets, nomenclature, classification systems, taxonomies, and the significance of data standards. Minimum data sets like the Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS) and Canadian MIS database (CMDB), and others will be analyzed.
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.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**2197 - HEALTH INFORMATICS** VLO 1 Assess organizational requirements for health information system technologies (HIST). VLO 2 Formulate change strategies to implement appropriate health information systems technologies (HIST) within the health-care setting. VLO 3 Develop, implement, and evaluate health information management practices, policies and processes to support client care, organizational goals, operations, and regulatory compliance. VLO 4 Apply business and system analysis techniques to evaluate the effectiveness of health information systems technologies within a health-related setting. VLO 5 Integrate relevant standards and professional, ethical and legislative requirements with the appropriate health information system technologies. 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. VLO 7 Design training and education for the effective use of HIST throughout an organization. VLO 8 Communicate effectively and professionally to promote inter-professional collaboration across the organization.
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.

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	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.
	EES 3 Execute mathematical operations accurately.
	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: 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:	A+ = 90-100% A = 80-89% B = 70-79% C = 60-69% D = 50-59% F < 50% 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 advance, during class. Labs and assignments that are deemed late will have a 10% reduction per academic day to a maximum of 5 academic days at 50% (excluding weekends and holidays). Example: 1 day late - 10% reduction, 2 days late, 20%, up to 50%. After 5 academic days, no late assignments and labs will be accepted. If you are going to miss a lab / assignment deadline due to circumstances

beyond your control and seek an extension of time beyond the due date, you must contact your professor in advance of the deadline with a legitimate reason that is acceptable.

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 can be up to 50 minutes after class starts or until that component of the lecture is complete.

The total overall average of test scores combined must be 50% or higher in order to qualify to pass this course. In addition, combined tests, Labs / Assignments total grade must be 50% or higher.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Describe accurate codes and standards to relevant personal health information from individual client visits by identifying coding, classification and abstracting systems proficiently.	1.1 Describe different classification and data abstraction systems in Canada including acute care, rehab, primary care, mental health, and community care. 1.2 Analyze classification systems implementation, including but not limited to: training, standards, minimum data set (MDS), cost, technology, care level, non-mandated implementation considerations. 1.3 Interpret the ICD-10-CA and CCI classification systems. 1.4 Explain grouping and case weighting methodologies used in Canada and how diagnosis and intervention coded data are used within these systems (e.g. Case Mix Groups, Resource Intensity Weight, Day Procedure Groups, and Comprehensive Ambulatory Classification System).
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Use knowledge of data and information standards to meet requirements for data collection, quality and information management.	2.1 Explain the relationship between data quality and standards development initiatives and uses of data in health care. 2.2 Participates in the recommendation and implementation of mechanisms to improve the quality and consistency of information received from these systems/sources utilizing local, provincial and national data standards.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Identify relevant sources of demographic, clinical, and financial data and authoritative sources of routinely collected data for	3.1 Describe health data and information repositories, including but not limited to: CIHI, Statistics Canada, Ministries of Health (MoH), National Library of Medicine (NLM). 3.2 Summarize the application of privacy, security and

	purposes of epidemiological research and to meet requested information needs.	confidentiality principles in health information practice, including but not limited to: how client privacy is respected, confidentiality maintained and security ensured during data collection, use, disclosure, management, retention and destruction.
		3.3 Explain the definition and management of differing levels of information, for example: identifiable personal health information, de-identified information, and aggregate health information.
		3.4 Summarize the application of privacy, security and confidentiality principles in a spectrum of settings including health care delivery institutions, physician offices, Telehealth, remote locations, statistical organizations, etc.
	Course Outcome 4	**Learning Objectives for Course Outcome 4**
	Demonstrate the retrieval, analysis and presentation of relevant health information to stakeholders to support organizational decision-making, epidemiological studies and clinical research.	4.1 Summarize methods for assessing and improving the quality of care and services, including but not limited to: cost benefit analysis, fishbone diagrams, process mapping.
		4.2 Describe quality management including but not limited to: CQI, LEAN and the relationship to health care data.
		4.3 Assess the relationship between outcome measurement and quality management initiatives.
	Course Outcome 5	**Learning Objectives for Course Outcome 5**
	Discuss current and emerging technologies to support the management, analysis and presentation of health information.	5.1 Create graphical and tabular presentation of health care data to facilitate decision making, including but not limited to: balanced score cards, dashboards.
		5.2 Explain the analysis of health care data and information using presentation software.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments/Labs	50%
Final Project	20%
Tests	30%

Date: June 19, 2025

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