



COURSE OUTLINE: HIN203 - HEALTH INFO SYS ANLS

Prepared: Theresa Mudge
Approved: Martha Irwin - Dean

Course Code: Title	HIN203: HEALTH INFORMATICS SYSTEMS ANALYSIS & EV
Program Number: Name	2197: HEALTH INFORMATICS
Department:	COMPUTER STUDIES
Academic Year:	2025-2026
Course Description:	This course focuses on current and evolving systems used in health care settings. Students will assess existing processes and create potential ones using different business or clinical process mapping methodologies and modeling tools. Concepts, techniques, and methodologies used in a systems development life cycle, as well as strategies of systems analysis, design and implementation will be discussed. The use of a variety of IT infrastructure management models will be studied. The role of various individuals in an organization will be analyzed in light of best practices in system development, training and implementation.
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:	2197 - HEALTH INFORMATICS
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 4 Apply business and system analysis techniques to evaluate the effectiveness of health information systems technologies within a health-related setting.
	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.
	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: 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:

Grade Definition

A+ = 90-100%

A = 80-89%

B = 70-79%

C = 60-69%

D = 50-59%

F < 50%

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F < 50%

CR 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.

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.

Books and Required Resources:

Systems Analysis and Design by Howard Gould
 Publisher: bookboon.com Edition: 1st Edition
 ISBN: 9788740314175
 Book is available for free download at bookboon.com

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Analyze healthcare organizational requirements and apply systems analysis tools to model, document, and evaluate current and proposed health information systems.	1.1 Evaluate and apply system analysis methodologies (eg. SDLC) to identify gaps in current health systems. 1.2 Produce and utilize ER diagrams and other modeling tools to model system processes. 1.3 Evaluate systems and understand how they work. 1.4 Gather requirements and examine the needs of various systems. 1.5 Simulate process re-design using workflow diagrams. 1.6 Describe prototypes and system disruptions.
Course Outcome 2	Learning Objectives for Course Outcome 2
Evaluate data sources and data collection tools in health systems and apply best practices to ensure relevant, high-quality data for system functionality and decision-making.	2.1 Describe and classify various data (structure, unstructured, metadata). 2.2 Compare data collection methods (manual, electronic, sensor-based) in different settings. 2.3 Assess the quality and usability of collected data for decision support. 2.4 Explain how classification and coding systems impact health data utility.
Course Outcome 3	Learning Objectives for Course Outcome 3
Design user-centered health information systems interfaces and workflows	3.1 Compare and contrast UI vs. UX in the HIS environment. 3.2 Design data output and input layouts that reflect usability and clinical needs.



	that align with organizational goals and support optimal data capture and user experience.	3.3 Evaluate how system design affects data accuracy, completeness and timeliness. 3.4 Develop mock-ups or wireframes that consider workflow. 3.5 Identify and demonstrate use of proper layouts.
	Course Outcome 4	Learning Objectives for Course Outcome 4
	Assess and plan for the implementation, evaluation, and continuous improvement of health information systems, with attention to change management, training, and sustainability.	4.1 Develop a system implementation plan including stakeholder roles and timelines. 4.2 Evaluate systems using usability and scalability. 4.3 Prepare to analyze system performance and user adoption post implementation.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	40%
Case Study	20%
Final Exam	20%
Midterm	20%

Date:

June 25, 2025

Addendum:

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

