Course Syllabus
SEMESTER
School of Nursing and Health Professions

Course Name:	**HIT** Database Management
Course & Section Number:	**HIT** 226
Meeting Day(s) & Time(s):	
Credits:	**2**
Contact Hours:	2
Text:	Introduction to Healthcare Informatics
Instructor's Name:	
Office Hours & Location:	
OCC Phone:	*NA*
OCC Email:	
Additional Contact Information:	*NA*

Please call me (name); it is my preferred name. If you have a preferred name, please let me know so I can use it. Please use only Owens email for course communications.

Catalog description:
Introduces database in relation to Health Information Technology. Students will assess data dictionaries and data sets, evaluate data governance standards, manage data within different database management systems, and identify standards for exchanging healthinformation.

Prerequisite/Corequisites:
Co-requisite: HIT 235
Prerequisite: IST 132, HIT 233

Course Materials:

Leming Zhou & Lesley Clack. (2023) Introduction to Healthcare Informatics 3rd Ed. American Health Information Management Association (AHIMA).
ISBN: 9781584268789

Supplemental Textbook:

Sayles, Nanette B. & Gordon, Leslie L. (2025) Health Information Management Technology: An Applied Approach. 7th Ed. AHIMA Press.

*If a **print book, e-book, or access code** is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called "Find Books" on the course schedule for each course section. See the example below.*

What You Will Learn in the Course

Course Objectives:
Course will...

- Discuss Database Management Systems (DBMS) within healthcare
- Explain data governance standards
- Discuss database standard development
- Outline the requirements for quality and performance through data (e.g. Joint Commission Core Measures)
- Explain the process for validating reliability and accuracy of data sources

Student Learning Outcomes:
The following domains of the Health Information Technology profession will be addressed in this course:

Students will:

Outcome	Chapters Where Assessed
Domain I. **Data Structure, Content, and Information Governance** I.1 Describe healthcare organizations from the perspective of key stakeholders I.2 Apply policies, regulations, and standards to the management of information	Chapters 2-6, 8, 10-14 assignments and tests

Outcome	Chapters Where Assessed
I.3 Identify policies and strategies to achieve data integrity I.4 Determine compliance of health record content within the healthcare organization I.5 Explain the use of classification systems, clinical vocabularies, and nomenclatures I.6 Describe components of data dictionaries and data sets I.6 (DM ONLY) Evaluate data dictionaries and data sets for compliance with governance standards	
Domain II. **Information Protection: Access, Use, Disclosure, Privacy and Security** II.I Apply privacy strategies to health information II.2 Apply security strategies to health information II.3 Identify compliance requirements throughout the health information life cycle	Chapters 10-12 assignments and tests
Domain III. **Informatics, Analytics and Data Use** III. I Apply health informatics concepts to the management of health information III.2 Utilize technologies for health information management III.3 Calculate statistics for healthcare operations III.4 Report health care data through graphical representations III.5 Describe research methodologies used in healthcare III.6 Describe the concepts of managing data III.7 Summarize standards for the exchange of health information III.6 (DM ONLY) Manage data within a database system III.7 (DM ONLY) Summarize standards for the exchange of health information	Chapter 3,5, 7-8 assignments and tests

Program Competencies:
The following program outcomes are assessed in this course

Competencies	Where Assessed
5.1 Data Collection and Databases	Retrieval of Data
5.2 Data Interpretation	Applied Data Analytics III
5.3 Data Visualization	Data Visualization IV

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit https://www.owens.edu/disability/, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: https://www.owens.edu/successcenters/.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at https://www.owens.edu /counseling/.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 123) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: https://www.owens.edu/connection/ or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit https://www.owens.edu/library/.

Students can find more information on campus resources, student support, student life, and security at this link.

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu The policy may be found on the Owens website: 3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See FERPA regulations for more information.

Use of AI Tools: This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.
This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible.

Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.
NOTE: Some instructors will also list specific acceptable and unacceptable uses or include a statement like "All written assignments, projects, and exams must be completed independently."

Student Responsibilities & Instructor Expectations

Student Responsibilities:

- To e-mail the instructor immediately with any questions regarding class procedure, assignments, or grades.
- To view the class on-line regularly (at least every other day, if not every day). A student who does not attend regularly may experience considerable difficulty. Regular attendance is essential in this class.
- It is your responsibility to learn of any announcements concerning assignments or changes from the syllabus.

Student Attendance:

Attendance in the core HIT classes is critical to the success of the student accomplishing the objectives of the course.

Makeup Work:
Students may request to make up missed coursework due to legitimate circumstances, including illness, emergencies, bereavement, military service, court obligations, or disability accommodations. Advance notice and documentation may be required. Title IX-related situations (e.g., pregnancy, parenting, sexual misconduct) are also covered and do not require documentation from the student.

Students should notify the instructor as early as possible and submit makeup work by the agreed-upon deadline. Instructors will determine appropriate and reasonable accommodations, though students who miss more than 25% of the course may not be eligible to make up all work.

HIT program students should note that stricter requirements may apply for labs, clinicals, or accreditation-related activities.

For full policy details or to appeal a decision, refer to the Owens Grade Appeal Policy

Instructor Expectations:

RESPONDING to E-MAIL:
In a web course, e-mail becomes a very important means of communication. I am not always online but I will try to respond to your messages as quickly as possible. Here are some general guidelines for my e-mail response time:

- Monday through Thursday: Within **24** hours
- Friday, Saturday, and Sunday: Within **48** hours

Classroom Environment:

To support a respectful and distraction-free learning environment, students must silence and store all personal electronic devices during class, lab, and experiential learning experiences. Unauthorized use of devices-including texting, recording, photographing, or posting to social media-is strictly prohibited and may result in disciplinary action or dismissal from the program.

Recording or transmitting images or conversations without written permission from all parties is not allowed. Use of electronic devices during exams may result **in** test failure at the instructor's discretion. Calculators may be used only with instructor approval.

Students are responsible for the security and storage of their own electronic devices.

How Grades and Determined and Major Assignments

The final course grade is to be computed using the following weights.

Evaluation Measure	Weighted Distribution
Discussion Boards	10%
EHR-Go Activities	30%
Assignments	30%
Tests (4)	20%
Final Exam	10%

Grading Scale

Grade	Points
A	93% -100%
B	85%- 92%
C	75%- 84%
D	60%- 74%
F	0%- 59%

HIT 226
Assignment Calendar/Schedule

All assignments, final discussion boards and tests are due on ***Sunday*** by 11:59pm the week they are assigned.

Week	Topic	
Week 1	Health Informatics & Health Care Data Overview	Syllabus Review Reading: Chapter 1 **Assignment:** Set up EHR-Go Account **Discussion Board:** Data Acumen Skills
Week2	Electronic Health Records & Clinical Information Systems	Reading: Chapter 2 **Assignment:** Case Study 1.11 Health Record Completion **EHR-Go:** The Power of the EHR **Test 1: Chapter 1&2**
Week3	Health Care Standards, Classification Systems, & Health Care Information Exchange	Reading: Chapter 3 **Assignment:** Case Study 1.28 Data Dictionary Flaw **EHR-Go:** Health Information Exchange
Week4	Implementing Healthcare Information Systems	Reading: Chapter 4 **Assignment:** Case Study 3.25 Strategic planning **Discussion Board:** Stakeholder and Communication **EHR-Go:** EHR Implementation

Week5	Understanding Databases	Reading: Chapter 5 **Assignment:** 3.22 Database structure **EHR-Go:** Orientation to Data Analytics I **Test 2: CH 3,4,5**
Week6	Healthcare Informatics and Decision Making	Reading: Chapter 6 **Assignment:** Case Study 1.16 Physician Assistant **EHR-Go:** Retrieval of Data
Week7	Introduction to Research	Reading: Chapter 7 **Assignment:** 3.9 Literature Review (Medline) **EHR-Go:** Applied Data Analytics II
Week8	Introduction to Data Science	Reading: Chapter 8 **EHR-Go:** Applied Data Analytics III
Week9	Data Analytics and Machine Leaming	Reading: Chapter 9 **Assignment:** 3.25 Strategic Planning **EHR-Go:** Orientation to Data Visualization IV **Test 3: CH 6, 7,8, 9**

Week 10	Privacy of Health Information Security for Health Information	Reading: Chapter 10 & 11 **Assignment:** 3.19 Desktop vs. Laptop Computers **EHR-Go:** ROI and Accounting of Disclosures
Week 11	Data Governance	Reading: Chapter 12 **EHR-Go:** Clinical Reminder Data Visualization V
Week 12	Ethics	Reading: Chapter 13 **EHR-Go:** SAFER Analysis: Clinician Communication **Test 4: CH 10, 11, 12, 13**
Week 13	Technology for Digital Health, Telemedicine, and Mobile Health Systems	Reading: Chapter 14 **Assignment:** 1.46 Telemedicine I **EHR-Go:** Cause and Effect: CDS Evaluation (AS)
Week 14	Public Health Informatics	Reading: Chapter 15 **EHR-Go:** Understanding TJC's Tracer Methodology
Week 15	Trending Topics	Reading: Chapter 16 **Discussion Board:** AI Use for Diagnoses
Week 16	Final	**Final Exam**

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.