



HCL-551-01W, Health Informatics & Digital Health

COURSE SYLLABUS: FALL 2026

INSTRUCTOR INFORMATION

Instructor: Sam Gherfal, MBA, LSSBB, A-CSM, CSPO

Office Location: Online

Office Hours: Virtual by appointment

Office Phone: TBD

Office Fax: TBD

University Email Address: Wisam.Gherfal@etamu.edu

Preferred Form of Communication: e-mail

Communication Response Time: within 24 hours

COURSE INFORMATION

Materials – Textbooks, Readings

1) *Informatics for Health Professionals*, Mastrian, Kathleen, and Dee McGonigle. (2nd Edition). Jones & Bartlett Learning, 2021. (Will be used primarily for Weekly Exams) - **ISBN:** 978-1-284-18209-5 (paperback)

- Available for purchase or rent from the bookstore, or purchase/rent from third party sites such as [VitalSource.com](https://www.vitalsource.com) as an eBook.

2) *Health Information Management : Concepts, Principles, and Practice*, available by our **online library** for students to use. (Will be used primarily for Weekly Case Assignments)

Course Description

This course examines the selection, implementation, integration, and effective use of health information systems and digital technologies within healthcare organizations. Emphasis is placed on the application of health informatics and emerging digital health technologies to enhance administrative and clinical operations, improve organizational efficiency and effectiveness, support data-informed decision-making, and advance the quality and delivery of healthcare services.

The syllabus/schedule are subject to change.

Student Learning Outcomes

1. **Explain and evaluate** foundational concepts in health information technology (HIT) and their role, application, and impact within modern healthcare organizations.
2. **Identify and assess** health information technologies and systems commonly used by healthcare administrators and other healthcare professionals to support clinical, administrative, and organizational functions.
3. **Analyze** planning, implementation, and management considerations associated with health management information systems (HMIS), including their influence on organizational strategy, operational performance, and financial outcomes.
4. **Evaluate** the ethical, legal, regulatory, and policy considerations associated with the use of health information technology, including electronic health records (EHRs), data privacy, security, and social media.
5. **Apply** health information technology concepts to healthcare administrative decision-making through the analysis of organizational challenges, emerging technologies, and information management practices.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Students enrolled in this online course should possess basic computer and digital literacy skills necessary to successfully participate in a graduate-level online learning environment. Students should be able to navigate the Brightspace Learning Management System (LMS), access and download course materials, upload assignments, participate in online discussions, complete online quizzes and examinations, and communicate effectively through email and other course communication tools. Students should also be comfortable using common productivity applications, such as word-processing, presentation, and spreadsheet software, as well as conducting academic research using online library databases and scholarly resources. Basic skills in web browsing, file management, document formatting, and troubleshooting routine technology issues are also expected. Although prior advanced technical, programming, or health informatics experience is not required, students should be willing to learn and engage with digital health technologies, data analytics, artificial intelligence applications, and other technology-based tools introduced throughout the course. Students are responsible for maintaining reliable access to a computer and internet connection and for developing an appropriate backup plan in the event of technical difficulties, consistent with the course technology requirements.

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Instructional Methods

This course is delivered fully online through the Brightspace Learning Management System (LMS). Instruction will include assigned textbook readings, supplemental course materials, PowerPoint presentations, case-based assignments, topic discussions, quizzes, examinations, and other digital learning resources designed to support the course learning outcomes. Recorded video lectures, demonstrations, or other instructional media may be provided when appropriate to clarify key concepts or expand upon course content. Students are expected to engage actively with the assigned materials and participate in course activities throughout each module. Questions regarding course content or assignments may be directed to the instructor via university email. Individual virtual meetings and office hours may also be arranged through Zoom as needed to provide additional guidance, clarification, or academic support.

Student Responsibilities or Tips for Success in the Course

As this is an online course, weekly contribution takes the place of attendance and will be monitored closely by the instructor. Students are expected to participate each week. A student who does not participate in the class and completes requirements **on time** will find it difficult to fulfill his/her course obligations. ***Student online activity is monitored. Brightspace automatically maintains a log of when students open documents and when they post to discussion boards. It maintains the full text of all postings***

Late Assignments and Makeups: Late submissions continue to be a serious problem with students. Not fully enforcing deadlines is unfair to those students who sacrifice to meet deadlines. Because unexpected personal emergencies arise, technology fails, and other delays occur, students should make every effort to submit their work well in advance of any deadline. **You will *earn ZERO points for late work*** (unless otherwise approved by the instructor in accordance with university policy or documented exceptional circumstances). All forum postings and assignment submissions must be submitted to the designated area. To reiterate, **late postings and submissions will NOT be accepted**. Computer problems, work issues, last minute illnesses, and other such reasons **do not** qualify as valid excuses.

Exams are delivered online using Brightspace and involve a defined completion/submission window. As such, makeups are not permitted unless the student can document a personal medical emergency incapacitating oneself for the ENTIRE DURATION of the noted completion/submission window. Makeups are not permitted for any other reason.

COURSE COMMUNICATION EXPECTATIONS

Appropriate behavioral conduct requires students to demonstrate the highest level of respect for fellow students, faculty, staff, coaches, and proctors in all communication

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including but not limited to emails, forum posts, video meetings, chat sessions, and group interactions. Disrespectful or discriminatory comments, lewd behavior, inciting language, profanity, or cyberbullying of anyone in a university context is not allowed. For more information about student conduct please see the syllabus supplement.

Students are responsible for everything presented and discussed online. Therefore, each student should follow these guidelines:

- Pay attention to what is said and how it is said; be courteous and respectful to everyone.
- Adhere to formal spelling, punctuation, and grammar rules and avoid writing in "text language".
- Utilize complete sentence; avoid the use of all upper-case letters as it indicates "shouting".

GRADING

Final grades in this course will be based on the following scale: 90-100% A; 80-89% B; 70-79% C; 60-69% D; 59% or below F. Grades are based on a total of 1000 points from the following items:

Module Exams	(7 exams, 70 points each)	490 pts
Assignments	(6 Assignments, 50 points each)	300 pts
Quizzes	(2 Quizzes, 60 points each)	120 pts
Case/Article/Topic Discussions	(3 discussions, 30 points each)	90 pts

Weights of the assessments in the calculation of the final letter grade.

Assignments	30%
Module Exams	49%
Discussions	9%
<u>Quizzes</u>	<u>12%</u>
TOTAL	100%

Assessments

Module Exams: Timed module exams occur weekly (except for Module 7). Module exams may contain multiple-choice and true/false questions; each exam is worth 70 points. These exams assess student knowledge regarding module readings, Powerpoint (PPT) slides (if available), and required videos (if available). Module exams are **independent** student assignments. Outside assistance of any kind and copying/sharing questions in any format are strictly prohibited.

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Assignments: Students are required to complete assignments for Modules 1-6 that focus on chapter concepts or assigned topics. For each assignment, students are required to meet the Turnitin threshold of 20% or less. Detailed instructions and grading rubric will be provided on Brightspace. Copying/sharing questions or answers in any format is strictly prohibited.

- **Research:** This graduate course may require you to conduct research with your Assignments. The online library offers numerous electronic databases, permitting students to conduct searches and read journal articles remotely. These databases are available to students, but access requires a user name and password. If you encounter difficulties gaining access or have other questions concerning resources, forward these inquiries directly to the online library or helpdesk.

Topic Discussions: During Modules 3, 4, and 8, students are required to read topics, answer questions based on textbooks information and PPT materials (if available) and respond to a classmate's posts. These topic discussions allow students to participate in peer-to-peer learning by interacting with each other regarding their assessment of Healthcare Informatics issues and topics. More details will be provided on Brightspace.

Quizzes: During Module 7, students are required to view instructional videos focused on Data Analytics and Artificial Intelligence (AI) in Healthcare. These topics provide students with hands-on exposure to practical applications of both topics, followed by a quiz-based assessment for each topic to evaluate comprehension and applied understanding. Additional details and instructions will be provided through Brightspace.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

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ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement

The instructor is committed to maintaining regular and meaningful interaction with students throughout the course. Course announcements, instructional materials, assignment feedback, and other relevant updates will be provided through Brightspace as appropriate. Students are encouraged to contact the instructor using their university email whenever they have questions regarding course content, assignments, grades, or other course-related concerns. The instructor will generally respond to student emails within **24 hours**. Individual virtual meetings or office hours may also be scheduled through **Zoom by appointment** when additional discussion, clarification, or academic support is needed. Students are encouraged to communicate questions or concerns in a timely manner so that appropriate guidance and assistance can be provided.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

The syllabus/schedule are subject to change.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

<https://inside.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf>.

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedures 13.99.99.R0.01](#)

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

Graduate Students Academic Integrity Policy and Form

[Graduate Student Academic Dishonesty Form](#)

<https://inside.tamuc.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf>

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Velma K. Waters Library Rm 162

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Phone (903) 886-5150 or (903) 886-5835
 Fax (903) 468-8148
 Email: studentdisabilityservices@tamuc.edu

Website: [Student Disability Services](#)

<https://www.tamuc.edu/student-disability-services/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Mental Health and Well-Being

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The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



<http://telusproduction.com/app/5108.html>

AI use policy [Draft 2, May 25, 2023]

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

Department or Accrediting Agency Required Content

Not applicable to this course.

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COURSE OUTLINE / CALENDAR

HCL 551 (FALL 2026) COURSE SCHEDULE						
Module Dates		Readings & Topics	PPT & Media	Module Exams/Quizzes	Assignments	Discussions
1	08/20 08/30	<i>Informatics for Health Professionals</i> - Ch1: Informatics, Disciplinary Science, and the Foundation of Knowledge - Ch2: Introduction to Information, Information Science, and Information Systems - Ch6: Systems Development Life Cycle: Informatics and Organizational Decision Making <i>Health Information Management: Concepts, Principles, and Practice</i> - Ch4: Health Information Systems: Supporting Technologies and Systems Development (Optional) Ch5: Electronic Health Records: Conceptual Framework	PPT Slides	Module 1 Exam (Due 08/30, 11:59 pm)	Assignment 1 (Due 08/30, 11:59 pm)	
2	08/31 09/06	<i>Informatics for Health Professionals</i> - Ch3: Computer Science and the Foundation of Knowledge Model <i>Health Information Management: Concepts, Principles, and Practice</i> - Ch6: Healthcare Data Life Cycle: Governance and Stewardship - Ch7: Data Capture, Maintenance, and Quality	PPT Slides	Module 2 Exam (Due 09/06, 11:59 pm)	Assignment 2 (Due 09/06, 11:59 pm)	
3	09/07 09/13	<i>Informatics for Health Professionals</i> - Ch7: Administrative Information Systems - Ch11: The Electronic Health Record <i>Health Information Management: Concepts, Principles, and Practice</i> - Ch11: Electronic Health Records: Application in Practice - Ch17: Revenue Cycle Management	PPT Slides	Module 3 Exam (Due 09/13, 11:59 pm)	Assignment 3 (Due 09/13, 11:59 pm)	Topic and Questions Discussion 1 (Due 09/13, 11:59 pm) Helpful reading Ch9: Electronic Security from your <i>Informatics for Health Professionals</i> textbook
4	09/14 09/20	<i>Informatics for Health Professionals</i> Ch13: Patient Engagement and Connected Health	PPT Slides	Module 4 Exam (Due 09/20, 11:59 pm)	Assignment 4 (Due 09/20, 11:59 pm)	Topic and Questions Discussion 2

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		Health Information Management: Concepts, Principles, and Practice - Ch14: Secondary Records and Healthcare Databases - Ch18: Healthcare Statistics		pm)	pm)	(Due 09/20, 11:59 pm)
5	09/21 09/27	Informatics for Health Professionals - Ch16: Data Mining as a Research Tool Health Information Management: Concepts, Principles, and Practice - Ch20: Research Methods. - Data Mining as a Research Tool	PPT Slides	Module 5 Exam (Due 09/27, 11:59 pm)	Assignment 5 (Due 09/27, 11:59 pm)	
6	09/28 10/04	Informatics for Health Professionals - Ch12: Informatics Tools to Promote Patient Safety, Quality Outcomes, and Interdisciplinary Collaboration Health Information Management: Concepts, Principles, and Practice - Ch22: Clinical Quality Management	PPT Slides	Module 6 Exam (Due 10/04, 11:59 pm)	Assignment 6 (Due 10/04, 11:59 pm)	
7	10/05 10/11	Intro to Healthcare Data Analytics - Tutorial video - Tutorial Exercise files/templates Intro to AI Transformation in Healthcare - Topic videos	Media	Quiz (Data Analytics) (Due 10/11, 11:59 pm) Quiz (AI in Healthcare) (Due 10/11, 11:59 pm)		
8	10/12 10/16	Informatics for Health Professionals - Ch5: Ethical and Legal Aspects of Health Informatics Health Information Management: Concepts, Principles, and Practice - Ch12: Legal Issues in Health Information Management - Ch13: Ethical Issues in Health Information Management Ch28 (Pages 859-862): Managing Organizational Compliance and Risk	PPT Slides	Module 8 Exam DUE FRIDAY (Due 10/16, 11:59 pm)		Topic and Questions Discussion 3 DUE FRIDAY (Due 10/16, 11:59 pm)
Abbreviated Week 8: Week 8 closes on Friday, October 16th , 11:59 p.m CT. Therefore, make note of the following: Deadline for Topic and Questions Discussion 3 is Friday, October 16th, 11:59 p.m CT.						

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- Deadline for Module 8 Exam is **Friday, October 16th**, 11:59 p.m CT.