



Course Syllabus

MED200: Electronic Healthcare Information Systems

Syllabus Overview

This syllabus contains all relevant information about the course: its objectives and outcomes, the grading criteria, the texts and other materials of instruction, and weekly topics, outcomes, assignments, and due dates. Consider this your roadmap for the course. Please read through the syllabus carefully and ask questions if you would like anything clarified. Please print a copy of this syllabus for reference.

Course Description

3 Credits

Prerequisites: MED 185; MED 101

This course provides an overview of information management and information technology for healthcare administrators. Attention is paid to content and function of the electronic health record (EHR).

Course Outcomes

Upon successful completion of this course, students will be able to:

- Cite specific examples of major types of health care information.
- Demonstrate ability to navigate an electronic health record and various other healthcare systems.
- Explain documentation requirements and the meaningful use of this information.
- Explain the importance of establishing a healthcare organization-wide security program and give examples of administrative, physical, and technical security safeguards currently in use by these organizations.
- Explain the process that a healthcare organization generally goes through in selecting a healthcare information system (RFI to RFP to acquisition and implementation).
- Define characteristics of data quality and discuss the challenges associated with measuring and ensuring healthcare data quality.
- Describe the purpose, use, and key attributes of various applications including: electronic health records, clinical information systems, administrative management systems, consumer decision data, and provider and health plan report cards.

Communication with Your Instructor

You will receive a welcome email from your instructor prior to the start of class. This email will contain your instructor's contact information. Your instructor will also be communicating with you via several methods in the course, including:

1. **Announcements** – This communication tool, located on the navigation menu within your course in Canvas, contains important updates. Be sure to check for new announcements from your instructor each time you access your course.
2. **Q&A** – Use this discussion board, located on the Home screen in your course, to communicate with your instructor and classmates regarding general course questions (e.g., missing links or assignment clarification).
3. **Inbox** – Use the Inbox, located in the top right corner of Canvas, to send a message to your instructor or classmates.

Required Textbook:

Essentials of Health Information Systems and Technology

(Navigate Advantage Access)

Jean A. Balgrosky

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ISBN 978-1-2840-3611-4

Bookstore is located in the left-hand navigation of all Canvas courses.

Library Services

Detailed information about the eLibrary can be found in the Student Resource Center. This is a course that all students have access to during their academic career.

Canvas Help Desk and Technical Questions

If you experience technical issues in your course, please contact the Canvas Help Desk by clicking the Help link (top right corner within Canvas). There are three ways to contact them:

1. Phone (888-628-2749)
2. Live chat
3. Report a problem (submit a ticket)

Be sure to notify your instructor of any technical difficulties you are experiencing.

Additional resources are available in the Student Resource Center and the Canvas Guides website:

<http://guides.instructure.com>

Weekly Schedule

Week 1 HIS Context, Scope, Definition and the Conceptual Model	
Outcomes	<ol style="list-style-type: none"> Identify the major reasons for the increase in health information systems activity in U.S. health care. Describe the purpose, definition, and scope of HIS using a conceptual model. Define the components of HIS including systems and their management, health informatics, data and analytics, research, policy, and public health. Describe organizational and community settings in which HIS and informatics can be used.
Navigate 2 Readings	<ul style="list-style-type: none"> Chapter 1. Alignment: Health Information Systems and Current Challenges in Health Care Chapter 2. HIS Scope, Definition and Conceptual Model
Lecture	HIS Conceptual Model
Discussion	<p>Discussion: Cite two different ways that HIS data can be used other than for supporting the delivery of care, e.g., for additional purposes such as protecting the public's health. Be specific in your response and provide details of the type of information and the proposed use.</p> <p>Please be sure to cite all references using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignment	There is no assignment this week.
Quiz	See Due Date in your course.

Week 2 Strategic Planning	
Outcomes	<ol style="list-style-type: none"> 1. Relate HIS strategy and strategic planning processes to organizational strategy and strategic planning processes. 2. Align HIS strategy with the mission, vision, values, and strategic plan of any type of healthcare organization. 3. Connect the development of HIS strategy to architectural principles and apply a nontechnical conceptual framework to HIS architecture and planning. 4. Identify the multiple key components to HIS strategic planning.
Navigate 2 Readings	Chapter 3. HIS Strategic Planning
Lecture	Why Strategy Matters
Discussion	<p>In your opinion: What is the difference between strategic planning and tactical planning and when should they be utilized? Please be specific and, where possible, defend your answer with data from valid sources. Be sure to include at least one scholarly reference cited using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignment	<p>In your own words, respond to the following question. Your response must be in APA format and cite any scholarly references used. Your response should be a minimum of 350 words.</p> <p>What do the four quadrants of the conceptual HIS planning framework presented in your reading represent? Why are the quadrants organized as they are, and what does it mean to have a balanced HIS architecture?</p>
Quiz	There is no quiz this week.

Week 3 HIS Application Systems and Technology	
Outcomes	<ol style="list-style-type: none"> 1. Explain how the software development life cycle is used to develop HIS applications. 2. Identify the benefit of application integration over application interfaces. 3. Describe the inpatient and outpatient clinical and administrative HIS applications in use today.
Navigate 2 Readings	<ul style="list-style-type: none"> • Chapter 4. HIS Application Systems and Technology • Introduction to Electronic Health Records (HER) – AAFP. http://www.aafp.org/practice-management/health-it/product/intro.html
Lecture	Electronic Health Records
Multimedia	Benefits of the EMR (Electronic Medical Record) Simply Put. https://www.youtube.com/watch?v=TiQ8c11dkU0
Discussion	<p>List two major inpatient or outpatient clinical information systems and explain how technology enables these systems to provide improved care. Please be specific and, where possible, defend your answer with data from valid sources. Please be sure to cite at least one scholarly reference using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignment	There is no assignment this week.
Quiz	See Due Date in your course.

Week 4 Managing HIS Services	
Outcomes	<ol style="list-style-type: none"> 1. Communicate the importance of tech readiness and gap analysis initiatives. 2. Define process improvement in the context of HIS. 3. Describe HIS project management methodology and knowledge areas. 4. Describe the planning steps leading up to and including implementation of new HIS. 5. Define the main steps of system selection and describe success factors and potential pitfalls. 6. Explain the key steps in selecting a new HIS.
Navigate 2 Readings	<ul style="list-style-type: none"> • Chapter 5. Managing HIS and Technology Services: Delivering the Goods • Chapter 6. Implementation
Lecture	Why HIS Projects Succeed or Fail
Discussion	<p>Management has asked you to consider a new HIS application. Tell us what that application is and describe its function. Tell us the steps you took to perform a technology assessment or gap analysis prior to deploying this new application. How did your process help to mitigate future system problems or crashes?</p> <p>Please cite at least one scholarly reference using APA format. Respond to your classmates' posts with comments and/or questions.</p>
Assignment	<p>Perform an internet search and find a current events topic over the past two years that is related to any aspect of health information systems project management methodology. Provide a summary (minimum of 300 words) and a link to the article. Please be sure to discuss why you believe the article relates to information you have learned from readings in this course.</p>
Quiz	There is no quiz this week.

Week 5 Health Informatics	
Outcomes	<ol style="list-style-type: none"> 1. Relate health informatics to the other spheres of the HISModel. 2. Define informatics 3. Describe health informatics in the context of all of biomedical informatics disciplines. 4. Define internal and external sources of datafor informatics reporting and analytics purposes. 5. Identify unintended consequences of HIS and technology and describe some reasons why they may occur.
Navigate 2 Readings	Chapter 8. Health Informatics
Lecture	Health Informatics: Unintended Consequences
Discussion	<p>Why is health informatics important in today's health care and public health environment in the U.S.? In the world? What type of transition is health care going through in the way it handles and processes information, and why is health informatics essential to that transition?</p> <p>Please give one specific example that supports your answer. Be sure to defend your answer with data from valid sources. Please be sure to cite at least one scholarly reference using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignments	There is no assignment this week.
Quiz	See Due Date in your course

Week 6 Data Analytics	
Outcomes	<ol style="list-style-type: none"> 1. Describe the myriad and competing sources for healthcare data. 2. Describe the size and exponential growth in healthcare data. 3. Describe the complexities of and challenges for healthcare data. 4. Identify the methods and priorities that health care may adopt to leverage both clinical and business data. 5. Describe the sources and the evolution of data. 6. Identify methods for receiving, organizing, storing, mining, and formatting data for BI and CI purposes.
Navigate 2 Readings	<ul style="list-style-type: none"> • Chapter 9. Data • Chapter 10. Business and Clinical Intelligence
Lectures	Business and Clinical Intelligence
Discussion	<p>Other industries have been using data for their own operational efficiencies for many years, e.g., the travel industry and consumer reviews of hotels. Please give one example of how the healthcare industry can use one of these methods (borrowed from another industry) to better navigate the adoption and use of data for either business or clinical benefit. Explain and defend your choice using data from valid sources.</p> <p>Please be sure to cite at least one scholarly reference using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignments	<p>What strikes you as the three biggest data challenges in health care? Provide your reason for each selection and defend your choice with data from valid sources. Response should be a minimum of 350 words. Please be sure to cite your references using APA format.</p>
Quiz	There is no quiz this week.

Week 7 Research, Policy and Public Health	
Outcomes	<ol style="list-style-type: none"> 1. Describe the relationships between research, policy, and public health activities. 2. Explain uses of HIS-based research in health policy and public health activities. 3. Outline various data sources for research in health care, policy, and public health organizations. 4. Review the practical and analytical uses of HIS and technology in public health. 5. Assess the pros and cons of current HIS, including EHR systems, in their ability to support comparative effectiveness and other types of health research.
Navigate 2 Readings	Chapter 11. HIS and Research, Policy, and Public Health
Lecture	Types of Research and Sources of Data
Discussion	<p>EHR systems provide much needed clinical data for research, policy, and public health activities. Select one concern about data provided from EHR systems and describe it. Is this concern well founded? Why or why not? What will improve the problems with this very important source of data for research, policy, and public health questions, analysis, and programs?</p> <p>Be sure to defend your answer with data from valid sources. Please be sure to cite at least one scholarly reference using APA format.</p> <p>Please review your classmates' responses and add to the conversation by providing different ideas.</p>
Assignments	There is no assignment this week.
Quiz	See Due Date in your course.

Week 8 New Directions for HIS and Technology	
Outcomes	<ol style="list-style-type: none">1. Describe trends and future applications of health information systems and technology.2. Outline evolving ethical considerations associated with the electronic health record.3. Review and evaluate learning in this course.
Navigate 2 Readings	Chapter 12. What Lies Beyond the Current State of HIS and Technology?
Lectures	Issues and Ethics: Considerations for the Future
Discussion	Reflection: What did you learn in Electronic Healthcare Information Systems? Choose two topics you learned in this course. How will this new knowledge be applied in your personal life and your current or future career?
Assignment	Complete the course evaluation survey.

Grading and Evaluation

Your grades will reflect the way in which you present and support your topics and positions in the various learning activities used in this course. The grades will be based on the quality and quantity of your comments and responses in the various activities.

Be sure to review the discussion and assignment rubrics in the course for specific grading criteria.

The various graded activities are weighted as follows:

Course Element	% of Final Grade
Assignments	25%
Discussions	50%
Quizzes	25%
Navigate 2 Readings	0%
Total	100%

Students will be expected to meet all the deadlines of the class as indicated throughout the course and in the syllabus. This is primarily so we don't get behind in the course. In addition, discussions cannot overlap from one week to the next. This is to ensure that all discussions and submissions take place within the week they are scheduled in order to be of value to the entire class as well as to help you not get behind. If there are extenuating circumstances, you will need to communicate that to the instructor and make arrangements accordingly, if appropriate.

Late Assignments: Exceptions are to be determined by the instructor on a case-by-case basis. There will be no opportunities for extra credit.

Learner Success Guidelines

These guidelines are provided to help you succeed in your coursework:

- Participate in the class introduction activity on the first day of class.
- Submit ALL assignments by the posted due dates and times.
- Check your emails daily.
- Contact Portal Help for logon problems or Canvas Help for technical issues with Canvas.
- Participate fully in all threaded discussions.
- Contact your instructor if you have questions about an assignment or need additional help completing your work successfully.

Academic dishonesty is grounds for dismissal from the program.

Academic Policies

The following Academic Policies can be found in the [Student Resource Center](#).

- Grading Criteria
- Reasonable Accommodations Policy
- Student Attendance Policy
- Academic Honesty and Integrity Policy

- Student Engagement and the Granting of Academic Credit
- Copyright Policy

Caveat

The above schedule, content, and procedures in this course are subject to change. All policies are superseded by the latest College Catalog available on our website: <https://www.cambridgecollege.edu/student-rights-complaints-grievances/student-code-conduct>