Semester: Spring 2017
Course Number and Title: 501 410:01 Information Systems for Healthcare
Course Day and Time: Wednesday's 6:10 pm – 9:00 pm
Course Instructor and Contact Information: Jim Cavanagh, Jim.Cavanagh@rutgers.edu
Course Classroom: AB4400
Office Hours and Location: By Arrangement
Additional Materials: Handouts as provided

Course Description (catalog): Exploration of the types and uses of information systems; their management and strategic application; related privacy policies and their transformative role in health care delivery.

Core Competencies Addressed: Health information Systems management and assessment (LEAP & AUPHA)
After completing this course, you will demonstrate an understanding of:
(a) HIMS core components and basic functions; the types and uses of different technology and applications; the planning, management and evaluation of HIMS in complex systems and networks; HIMS standards, policy and governance and; the analysis of adaptive information systems, data applications and project management in real world settings.
(b) basic skills encompassing complex problem solving and critical thinking, written, verbal and interpersonal communication, data analysis and understanding of informatics, quantitative and analytic reasoning and professional and leadership development.

Course Objectives:

- Understand HIMS core components and basic functions
- Describe the managerial roles and functions in HIMS
- Explain and categorize various HIMS technologies and applications
- Assess HIMS planning, management and evaluation in complex health systems
- Understand and assess interactive health networks, EMRs, and complex adaptive systems
- Define and explain HIMS standards, policy and governance
- Apply HIMS theory to address current challenges in health care delivery
## Class Outline by Week:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
</table>
| Jan 18th:       | Review of course & class outline of assignments, testing & grading composition  
                   Instructor Presentation:  
                   Health IT Regulatory Environment  
                   Readings Part I HIT Strategic Alignment  
                   Chapter 1: Connecting the Strategic Dots: Does HIT Matter?  
                   Chapter 2: External Environment  
| Jan 25th:       | Readings Part I HIT Strategic Alignment  
                   Chapter 3: Government Policy & Healthcare Reform  
                   Chapter 4: Leadership: The Case of the Healthcare CIO  
                   Chapter 5: HIT Governance & Decision Rights  
                   Instructor Presentation:  
                   Health Information Exchanges  
                   Continuum of Care  
| Feb 1st:        | Instructor Presentation:  
                   Accountable Care Organizations (ACOs)  
                   Population Health Management & The Institute for Healthcare Improvement’s “Triple Aim” concept.  
| Feb 8th:        | First exam covering Readings and Instructor Presentations through 2/1/17  
| Feb 15th:       | Readings: Part II Operational Effectiveness  
                   Chapter 6: HIT Architecture & Infrastructure  
                   Chapter 7: HIT Service Management  
                   Chapter 8: Systems Selection & Contract Management  
                   Instructor Presentation: Examples of Requests for Proposals  
| Feb 22nd:       | Readings: Part II Operational Effectiveness  
                   Chapter 9: Applications: Electronic Health Records  
                   Chapter 10: Applications: Management / Administrative and Financial Systems  
                   Instructor Presentation:  
                   Electronic Health Records and Electronic Medical Records  
                   Updates on Meaningful Use and ICD10  
                   Group assignments |
Mar 1st: Possible Guest Speaker – Topic TBD
Presentation Overview

Mar 8th: Second exam covering Readings Chapters 6 – 10 and Instructor Presentations through 3/1/17
Presentation topic approved for each group.

Mar 15th: No Class – Spring Recess

Mar 22nd: Readings: Part III: Strategic Competitive Advantage
Chapter 12: The Knowledge Enabled Organization
Chapter 13: HIT Value Analysis

Mar 29th: Student Presentations

Apr 5th: Student Presentations

Apr 12th: Student Presentations

Apr 19th: Student Presentations

Apr 26th: Exam 3 (Cumulative / Last Exam)
Course Assessment and Grading:

Successful completion of exams, project and class participation satisfies the AUPAH and LEAP core competency described above. Final grades will be calculated according to the following criteria:

20% Exam 1
20% Exam 2
20% Exam 3 (Cumulative)

The examinations demonstrate the student’s ability to:
- Understand HIMS core components and basic functions
- Describe the managerial roles and functions in HIMS
- Explain and categorize various HIMS technologies and applications
- Assess HIMS planning, management and evaluation in complex health systems
- Understand and assess interactive health networks, EMRs, and complex adaptive systems
- Define and explain HIMS standards, policy and governance

20% Project Assignment - Presentation

This assignment demonstrates the student’s ability to:
- Work with a Team
- Apply HIMS theory to address current challenges in health care delivery
- Analyze and apply core competencies including critical thinking and quantitative reasoning, data analysis and understanding of informatics and complex problem solving

Group Assignments
- Students will be assigned to work on a team of 3-4 members.
- A 30 minute group Power Point Presentation with each student presenting for 5 –10 minutes will be required by the Presentation teams
- In addition a 3-5 pages Executive Summary Report will be handed in with a bibliography of research sources
- Potential Student Presentation Topics:
  - Health Information Exchanges across the United States
  - Accountable Care Organizations
  - EMR functional requirements and cost comparisons of leading vendors
  - Impact of Meaningful Use on providers and/or EHR vendors
  - Uses of Big Data in Health Care
  - Actual System Selection Process
Security and Privacy strategies and considerations of HIT
- Current best practices of Internet use
- IT implications of ACA
- Any topic approved by end of class on March 8th

20% Class/Group Participation and scores on any quizzes
This assignment demonstrates the student’s ability to:
- Assess real-life case studies and offer rational and evidence based solutions
- Attend Classes and participate in class discussion
- Demonstrate critical thinking and analytic reasoning, verbal and interpersonal communication skills, and application of theory to practice

Attendance and Cancellation of Classes: In accordance with Rutgers University regulations, attendance is expected at all regularly scheduled meetings of a course and individual courses may set policies for maximum absences. Please refer to the link below for more specific information:
http://sasundergrad.rutgers.edu/academics/courses/registration-and-course-policies/attendance-and-cancellation-of-class

Academic Integrity:

Academic Integrity is vital to the mission of Rutgers, to education at Rutgers and membership in the Rutgers community. It is a core value that supports trust among students, and between students and teachers. It is also a shared value; administration, faculty and students each play a vital part in promoting, securing and nurturing it.

Academic dishonesty is not an individual act that affects only the students involved. It violates communal trust, impacts other members of the community, and is an offense against scholarship. For this reason, any instance of cheating or plagiarism will be dealt with harshly.

Honesty matters. As a shared value, administration, faculty and students each play a vital part in promoting, securing and nurturing it. See the Rutgers Academic Code and Academic Oath at:
http://academicintegrity.rutgers.edu/