Georgia Southern University
Digital Commons@Georgia Southern

Spring 2018

HSPM 7236-A - Health Informatics

Jeffery A. Jones
Georgia Southern University, jajones@georgiasouthern.edu

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/coph-syllabi

Part of the Public Health Commons

Georgia Southern University
Jiann-Ping Hsu College of Public Health

HSPM 7236-A - Health Informatics

Spring 2018

Instructor: Jeff Jones, PhD.
Office: Hendricks Hall, Room 2005
Phone: (912) 478-7422
E-mail Address: jajones@georgiasouthern.edu
Office Hours: Mondays/Wednesdays, 1pm-3:30pm
Class Meets: Mondays, 6pm-8:45pm, January 8, 2018 to April 30, 2018 in Information Technology Building Room #3202

Course Catalog available at:
http://students.georgiasouthern.edu/registrar/pdf/catalogs/GraduateCatalog/index.htm
under Jiann-Ping Hsu College of Public Health Programs

Prerequisites: N/A

FOLIO address: http://my.georgiasouthern.edu

Catalog Description

This course presents the knowledge, infrastructure, functions, and tools of health informatics. It explores technology, planning and management and applications in public health and health care. The emphasis is on conceptual frameworks as well as a deeper level of engagement on system applications. It focuses on the application of health technology, with a particular emphasis on the private/public sector of health management. It is designed to familiarize students with core concepts and issues confronting managers in the health sector associated with planning, implementation and evaluation of information systems. The course provides an overview of the theory, processes and applications of information systems and how they relate to health policy and management. It also provides a basic understanding of data standards and requirements, and the critical concepts and practice in mapping and interpreting health information.

Required Textbook:

Health Informatics: A Systems Perspective, Eds. Gordon D. Brown, Timothy B. Patrick and Kalyan S. Pasupathy, 2013, Chicago, IL: Health Administration Press, ISBN 978-1-56793-435-9

Additional Readings:

See syllabus & website for additional assigned articles.

Required Resource:

Microsoft Office Professional (available in computer labs)

MPH Core Competencies in Health Policy & Management

1. Define the main components and issues of the organization, financing and delivery of public health systems in the US and compare the economic, professional, social and legislative influences to include safety preparedness.

2. Describe the legal, values and ethical dilemmas in public health that are inherent in efforts to control cost, while assuring access and quality of services for the public.

3. Compare the policy development, assessment, and evaluation process for improving the health status of populations; compare the potential impacts of policy and management on the conduct of public health research and practice.

4. Describe the principles of program development, management, budget preparation with justification and evaluation as related for public health initiatives; in that effort, define quality, cost benefit and performance improvement concept to address organizational performance issues in public health as well as trends in planning, resources allocation, and financing their effects on consumers, providers and payers in public health.

5. Define principles of strategic planning and marketing in public health and define how "systems thinking" can contribute to solving public health organizational pro blems.

6. Compare leadership skills for building partnerships in public health and demonstrate health policy and management effectiveness using appropriate channels and technologies.

MHA Core Competencies

COMPETENCY DOMAINS

A. *Measurement and Analysis* Measurement: Identify information needs, and gather and understand relevant data information in order to define a problem, to assess a situation, or to implement a set of metrics.
    Analysis: Organize, manipulate and use information to assess performance, to identify alternative courses of action, to investigate hypotheses, or to accomplish other strategic goals.

B. *Communication*: Receive and convey information in ways that encourage continued dialogue among stakeholders. Effective communication involves strong written and oral transmission skills, responsive listening, and use of creative strategies for exchanging information.

C. *Leadership*: Influence others to reach their highest level of effectiveness in achieving common goals, both as individuals and in teams. Establish direction and engage various constituencies to

produce a shared vision of the future, motivating and committing them to action, and making them responsible for their performance.

D. ***Law and Ethics***: Establish high ethical standards, create a culture of shared ethical values and legal understanding, and transform those ideals into visions and expected behaviors.

E. ***Professional Development***: Required to excel professionally throughout one's career and to make meaningful contributions to the field.

Course Learning Objectives

1. Be familiar with the developments in health informatics, including use of electronic health records.(8)
2. Think in terms of information systems and underlying technological infrastructure (information architecture), rather than in terms of individual computer applications.(6)
3. Be familiar with accepted models and processes for managing information resources.(5)
4. Have a basic understanding of computer networking, and be able to describe the cost and support implications of various networking solutions. (11)
5. Understand the roles of different stakeholders in development and use of health informatics (4)
6. Be familiar with data standards for storage and transmission, and understand the domains of public health-relevant standards and standard-setting bodies.(6,7, 8, 11)
7. Understand the respective roles of policy and security in protecting privacy and confidentiality, and place a high priority on assuring privacy and confidentiality in the context of information systems.(16)
8. Communications, information acquisition, and information dissemination.(16)
9. Be able to apply traditional management skills to the management of information technology personnel and projects (13).
10. Be able to evaluate technology options and procure information technology for the enterprise in a cost-effective and justifiable manner.(14)
11. Be able to provide leadership toward the acquisition of integrated, cost-effective public health information systems within their public health enterprise. (11)
12. Discuss informatics as used in Public Health (15)
13. Identify and demonstrate the various tools used in Information Technology(12)
14. Investigate solutions in Information Technology by using web and other research tools.(13)
15. Analyze current healthcare information systems. (1, 2)

Overview of the content to be covered the semester:

Date		Topics	Readings to Be Completed by Following Class Additional Readings Will Be Assigned and Available on Folio.	Assignments Due Date (Due by 6pm on the day listed. Assignment 1, for example, is due by 6pm, Jan. 22.)
Jan. 8, 2017		Introducing Health Informatics: People, Data and Technology Talking the Talk: Medical, Informatics, & Health Care Terminology	• Textbook, Chapters 1, 2, 10 & 11 • Terminology List 1	
Jan. 15		Holiday, Dr. MLK Day		
Jan. 22	People	The Quantified Self	• Textbook, Chapter 12 • Terminology List 2	• Assignment 1 • Terminology Quiz 1
Jan. 29		Down Deep: Human Genetics and Genomics	• Textbook, Chapters 4 -10 • Terminology List 3	• Assignment 2 • Terminology Quiz 2
Feb. 5		From Hippocrates to HMOs: Informatics and Medical Decisions	• Terminology List 4 (for Feb. 22)	• Assignment 3 • Terminology Quiz 3
Feb. 12				**Exam 1**
Feb. 19		Big Data: Across the Lifespan	• Terminology List 5	• Assignment 4 • Terminology Quiz 4
Feb. 26	Data	Big Data: Across the Lifespan	• Terminology List 6	• Terminology Quiz 5
Mar. 5		Big Data: Across the Lifespan	• Textbook, Chapter 13 • Terminology List 7	• Assignment 5 • Terminology Quiz 6
Mar. 12		Holiday, Spring Break		

Mar. 19		Big Brother: Privacy and Data	For April 6: • Terminology List 8	• Assignment 6 • Terminology Quiz 7
Mar. 26				**Exam 2**
Apr. 2	Technology	Geographic Information Systems & Health Care Visualizations	• Textbook, Chapters 3, 14, & 15 • Terminology List 9	• Terminology Quiz 8
Apr. 9		EMRs & EHRs	• Terminology List 10	• Assignment 7 • Terminology Quiz 9
Apr. 16		The Future of Health Informatics		• Terminology Quiz 10
Apr. 23		Synthesis and Review		
April 30				Final Exam, 6pm, in our regular classroom

Instructional Methods:
Class meetings will be a combination of lecture, class discussion, and active participation.

Course Assignments:

Weekly terminology quizzes (20%): There will be 10 online quizzes assessing your knowledge of that week's terminology list covering medical, informatics, and health care terminologies. The quiz will become available on Folio on Monday at 12:30am Eastern and must be completed by 6pm Eastern the following Monday. The purpose of the OPEN BOOK, online quizzes is to assure that students are familiar with important medical terminology.

Exams (60%): The exam will be based on the required readings, lectures, and classroom discussions and will be include multiple choice / open response questions as well as short answer / paragraph length responses. The exams will be closed book and in class. The final will be the third exam.

Assignments (20%): The course includes 7 short assignments to involve students actively in that module's content. Assignments will generally be submitted via Folio and are due on the assigned date at 6pm Eastern, Mondays.

Grading:

Basis	Percentage of grade
10 weekly terminology quizzes	20% (10 quizzes x 10 points possible = 100 points possible)
3 examinations	60% (3 exams x 100 points possible = 300 points possible)
7 assignments	20% (7 assignments x 14 points possible = 98 points possible)

Points	Grade
90 - 100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

Expectations:
All assignments must be delivered to the instructor on the specified due date and time. Late assignments will not be accepted. Extensions will not be offered. Missed quizzes and exams may not be made up. Extenuating circumstances will be considered on a case-by-case basis

Please turn off all cell phones during any class meetings, since ringtones are disruptive to others.

Laptops, cell phones, calculators, PDA, tablets, or other devices will not be allowed during testing unless stipulated previously by the professor.

Class Attendance and Participation Policy
Federal regulations require attendance be verified prior to distribution of financial aid allotments. Regular attendance is expected. However, attendance will not be officially recorded after the first class period.

Attendance at all scheduled classes and online chat sessions is required by Health Policy and Management policy. Unexcused absences will incur deduction of one letter grade per day late for any assignments. To request an excused absence, please contact Dr. Jones via email and arrange to make up any missed work. Requests are preferably made two weeks in advance, but Dr. Jones understands that certain emergencies do not allow for such advanced arrangements.

Plagiarism:
"According to the Academic Dishonesty Policy of GSU, Plagiarism includes (but is not

limited to):

     A. Directly quoting the words of others without using quotation marks or indented format to identify them.

     B. Using published or unpublished sources of information without identifying them.

     C. Paraphrasing material or ideas without identifying the source.

     D. Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material.

If you are accused of plagiarism by a JPHCOPH, the following policy, as per the Judicial Affairs website (http://students.georgiasouthern.edu/judicial/faculty.htm) will be enforced:

PROCEDURES FOR ADJUDICATING ACADEMIC DISHONESTY CASES

First Offense - In Violation Plea

1.If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is a first violation of academic dishonesty. The incident will be reported via the following website: http://students.georgiasouthern.edu/judicial/faculty.htm

2. If it is a first violation, the professor should talk with the student about the violation. **If the student accepts responsibility in writing and the professor decides to adjudicate the case, the following procedures will be followed:**

     a.The student will be placed on disciplinary probation for a minimum of one semester by the Office of Judicial Affairs.

     b.The student will be subject to any academic sanctions imposed by the professor (from receiving a 0 on the assignment to receiving a failing grade in the class).

     c. A copy of all the material involved in the case (Academic Dishonesty Report Form and the Request For Instructor to Adjudicate Form) and a brief statement from the professor concerning the facts of the case and the course syllabus should be mailed to the Office of Judicial Affairs for inclusion in the student's discipline record.

First Offense - Not In Violation Plea (student does not admit the violation)

If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is the first or second violation of academic dishonesty. The student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case. If the student is found responsible, the following penalty will normally be imposed:

     a.The student will be placed on Disciplinary Probation for a minimum of one semester by the Office of Judicial Affairs.

     b.The student will be subject to any academic sanctions imposed by the professor.

Second Violation of Academic Dishonesty

If the professor and the Dean of Students agree that the evidence is sufficient to warrant

a charge of academic dishonesty, and if it is determined this is the second violation, the student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case.

If the student is found responsible, the following penalty will normally be imposed:
       a. Suspension for a minimum of one semester or expulsion.
       b. The student will be subject to any academic sanctions imposed by the professor.

NOT RESPONSIBLE FINDING

When a student is found not responsible of academic dishonesty, the work in question (assignment, paper, test, etc.) would be forwarded to the Department Chair. It is the responsibility of the
Department Chair to ensure that the work is evaluated by a faculty member other than the individual who brought the charge and, if necessary, submit a final grade to the Registrar. For the protection of the faculty member and the student, the work in question should not be referred back to the faculty member who charged the student with academic dishonesty.
In the case of a Department Chair bringing charges against a student, an administrator at the Dean's level will ensure that the student's work is evaluated in an appropriate manner.

CONFIDENTIALITY

In accordance with provisions of the Family Educational Rights and Privacy Act of 1974 and the Georgia Open Records Act, any information related to a violation of academic dishonesty or the outcome of a judicial hearing regarding academic dishonesty, is prohibited and must be treated as confidential by members of the faculty."

University Calendar for the Semester
The University Calendar is located with the semester schedule and can be found at:
http://em.georgiasouthern.edu/registrar