UNIVERSITY OF MINNESOTA

Course Syllabus

School of Public Health

PubH 7562 (200, 320) INFORMATION TECHNOLOGY IN HEALTH CARE
Summer Term: June 29, 2015 – August 14, 2015

Credits:	**2 credits**
Meeting Days:	**Online, Course week is Monday through Sunday**
Meeting Time:	**Online**
Meeting Place:	**Online**
Instructor:	**Ken Bobis, Ph.D.**
Office Address:	**Online Faculty; Dr. Bobis resides in Scottsdale, Arizona (2 hours behind CDT)**
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Office Hours:	**By appointment**

I. Course Description

This course provides the knowledge required to manage the Information Technology (IT) function of a typical healthcare organization. It focuses on understanding the following as they relate to the healthcare setting: the need for technology; the types of technologies in use; requesting, selecting, implementing, and supporting information technology solutions.

II. Course Prerequisites

None

III. Course Goals and Objectives

By the completion of this course, the student should have acquired a broad perspective on managing a healthcare Information Technology function. Specifically, the course seeks to provide students with the skills to complete the following tasks:

- Demonstrate how healthcare information systems have evolved and the major clinical and administrative applications in use today
- Illustrate healthcare information systems and the value they can bring to healthcare organizations, its providers and to the patients they serve
- Describe the process that a healthcare organization goes through in selecting, purchasing, and implementing a health care information system
- Discuss the necessity of a return-on-investment analysis to obtain approval for IT projects

- Discuss the issues that can arise during the system acquisition process and strategies for addressing them
- Explain the organizational and cultural aspects of incorporating information technology systems into a healthcare organization
- Discuss a basic understanding of information technology concepts needed to support healthcare information systems in terms of database, networks, standards, and security
- Develop a basic understanding of the IT function, the services typically found in an IT department in a large health care organization, the required organizational structure, and the types of professionals and staff generally employed there
- Identify a top-level view of what is takes to effectively manage, budget, govern, and evaluate information technology services in a healthcare organization.

IV. Methods of Instruction and Work Expectations

The instructional methods used in this course include:

- Course Lectures
- Readings
- Group discussion
- Individual assignments

While the use of a textbook is not common in the curriculum, the one used in this class has been co-written by one of the foremost IT Leaders in the industry today. As such, it is a reference model for how to organize and operate the information technology function in a healthcare organization.

V. Course Text and Readings

Health Care Information Systems: A Practical Approach for Health Care Management
Karen A. Wager, Frances W. Lee, and John P. Glaser
Publisher: Jossey-Bass; 3rd Edition (August 5, 2013)
ISBN-10: 1118173538
ISBN-13: 978-1118173534

VI. Course Outline/Weekly Schedule

Lesson / Week	Assessment	Type	Due Dates
1	*Information Technology in Healthcare*		
	Discussion Questions (2)	Individual	July 2
2	*Technology used in Clinical Settings*		
	Discussion Questions (2)	Individual	July 9
3	*The IT Process: From request to acquisition*		
	Discussion Questions (2)	Individual	July 16
	Case Study A: *Selection of a Patient Safety Strategy*; Wager et al., p. 601, Case 3	Individual	July 19
4	*The IT Process: Technology Implementation and Support*		
	Discussion Questions (2)	Individual	July 23

	Case Study B: *Implementing a Syndromic Surveillance System*; Wager et al., p. 620, Case 12	Individual	July 26
5	*Senior Management Challenges: Organization and Management*		
	Discussion Questions (2)	Individual	July 30
	Case Study C: *Strategic IS Planning for the Hospital ED*; Wager et al., p. 603, Case 4	Individual	August 2
6	*Senior Management Challenges: Governance and Strategic Alignment*		
	Discussion Question (1)	Individual	August 6
	Paper: The Effect of *Meaningful Use* on Public Health Organizations	Individual	August 9
7	*Technologies that Support Healthcare Information Systems*		
	Discussion Questions (2)	Individual	August 12

VII. Evaluation and Grading

Research Paper

In Week 6, the individual assignment is a research paper on *Meaning Use* and its effect on public health organizations. While due near the end of the course, it would be good to start gathering information on this topic throughout.

Case Study Questions

Case studies are assigned during several weeks in the course. These industry examples are each accompanied by a set of questions. Responses to these questions form the core of the individual assignment in Lesson 3, 4, and 5.

Discussion

Students are required to participate in weekly class discussions. Student-to-student interaction is a key factor in understanding, absorbing, and applying the knowledge contents of this course to organizational performance problems.

The two weekly discussion questions will be based on weekly readings. Responses to the topics should be substantive and based on the student's own experience, a comprehensive understanding of the assigned readings, and individual research. A student's responses should reflect the student's depth of understanding of the issues and should be clear, succinct, to the point, and reflect critical thinking on the topic of the discussion. Most weeks, students will be divided into random groups that change each week and will participate with each other in those small groups.

Note: Reponses to the week's Discussion Question(s) are due on Thursday @ 11:55pm CDT of each course week. Students must then respond to one other classmate's answer for each of the two questions. The due date for these two responses is Saturday @ 11:55pm CDT of the course week

Late Policy

All assignments are due by 11:55pm CDT on the due dates indicated for each class deliverable. Assignments posted after the indicated "due by" dates will be subject to a loss of 10% of the full point value of the assignment for each day late, for a maximum of five (5) days. No assignment can be accepted for grading after 11:55pm CDT of the 14th day after its original due date (two weeks). **Please note that all reasons for posting a late assignment are considered in the same manner. In other words, there is no reason that would avoid this penalty.**

Lesson / Week	Assessment	Points
1	Discussion Questions (2)	10
2	Discussion Questions (2)	10
3	Discussion Questions (2)	10
	Case Study A: Selection of a Patient Safety Strategy	20
4	Discussion Questions (2)	10
	Case Study B: Implementing a Syndromic Surveillance System	20
5	Discussion Questions (2)	10
	Case Study C: Strategic IS Planning for the Hospital ED	20
6	Discussion Questions (2)	10
	Paper: The Effect of *Meaningful Use* on Healthcare Organizations outside of the United States	20
7	Discussion Questions (2)	10
	Total	150

Final grades will be assigned based on the following criteria

A = 150-140	B = 130-125	C = 115-110	D+ = 104-101
A- = 139-134	B- = 124-120	C- = 109-105	F = 89 or below
B+ = 133-131	C+ = 119-116	D = 100-90	

The University Senate Grading Policies

A	Achievement that is outstanding relative to the level necessary to meet course requirements.
B	Achievement that is significantly above the level necessary to meet course requirements.
C	Achievement that meets the course requirements in every respect.
D	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
S	Achievement that is satisfactory, which is equivalent to a C- or better (achievement required for an S is at the discretion of the instructor but may be no lower than equivalent to a C-).
I	(Incomplete) Assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., hospitalization, a student is prevented from completing the work of the course on time). Requires a written agreement between instructor and student.
F or N	Represents failure (or no credit) and signifies that the work is either (1) completed but at a level of achievement that is not worthy of credit, or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an "I."

Course Evaluation

Beginning in fall 2008, the SPH will collect student course evaluations electronically using a software system called *CoursEval* (www.sph.umn.edu/courseval). The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grades just as soon as the faculty member renders the grade in SPHGrades: www.sph.umn.edu/grades. All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not. Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered.

Incomplete Contracts

A grade of incomplete "I" shall be assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., documented illness or hospitalization, death in family, etc.), the student was prevented from completing the work of the course on time. The assignment of an "I" requires that a contract be initiated and completed by the student before the last official day of class, and signed by both the student and instructor. If an incomplete is deemed appropriate by the instructor, the student, in consultation with the instructor, will specify the time and manner in which the student will complete course requirements. Extension for completion of the work will not exceed one year (or earlier if designated by the student's college). For more information and to initiate an incomplete contract, students should go to SPHGrades at: www.sph.umn.edu/grades.

University of Minnesota Uniform Grading and Transcript Policy

A link to the policy can be found at onestop.umn.edu.

VIII. **Other Course Information and Policies**

Grade Option Change (if applicable)

For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester courses) can be found at onestop.umn.edu.

Course Withdrawal

Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Student Services Center at sph-ssc@umn.edu for further information.

Student Conduct, Scholastic Dishonesty and Sexual Harassment Policies

Students are responsible for knowing the University of Minnesota, Board of Regents' policy on Student Conduct and Sexual Harassment found at www.umn.edu/regents/polindex.html.

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized, and offenses will be reported to the SPH

Associate Dean for Academic Affairs who may file a report with the University's Academic Integrity Officer.

The University's Student Conduct Code defines scholastic dishonesty as "plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis."

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own. Serious, intentional plagiarism will result in a grade of "F" or "N" for the entire course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity: http://writing.umn.edu/tww/plagiarism/.

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to http://tutorial.lib.umn.edu/ and click on "Citing Sources".

In addition, original work is expected in this course. Unless the instructor has specified otherwise, all assignments, papers, reports, etc. should be the work of the individual student. It is unacceptable to hand in assignments for this course for which you receive credit in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project is acceptable.

Disability Statement

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have a documented disability (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Services to have a confidential discussion of their individual needs for accommodations. Disability Services is located in Suite180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling 612/626-1333 (voice or TTY).