

## COURSE SYLLABUS

### MHC695: Health Information Systems

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#### Course Description

This course is a comprehensive introduction to concepts and applications of information management in health care. Students explore the latest legislation affecting health data as well as the use of data warehousing, web technologies, database management systems, manipulation of electronic health records, and regulatory compliance in health information practice.

#### General Course Information

Number of Units/Weeks/Sessions	5/5/10
#Hours Lecture/#Hours Laboratory/#Hours HWs*	50/0/100
Prerequisite(s)	None
Co-requisites (s)	None
Course Developer(s)	Carl Ewig, Ph.D.
Date Approved / Last Review	2011 / Aug. 2014

\*Homework Projects

#### Learning Outcomes

- Evaluate the basic features of modern health care management software systems.
- Assess current general health care information regulations, laws, & standards.
- Appraise new state and federal laws and regulations affecting finance in the health care environment including compliance and litigation.

#### Instructional Methods Employed in this Course

- Lectures, some supported by PowerPoint media and handouts.
- Whole class discussions, generally correlated with lecture topics.
- Small group discussions, stimulated by instructor-provided case studies, scenarios and other materials.
- Peer-to-peer activities, in which students are paired to work together on common projects usually requiring research.
- Students' hands-on experience with an actual health care management system.
- Student group presentations, as members of small teams, to highlight the results of work completed on an assignment.
- Build on prior learning of students to enhance richness of class activities.

#### Information Resources for this Course

##### ☐ Textbook

Wager, K. A.; Lee, F. W.; Glaser, J. P. Health Care Information Systems: A Practical Approach for Health Care Management (2nd Edition). Jossey-Bass, San Francisco, 2009. ISBN: 978-0470387801.

##### ☐ Other Materials

Burke, L.; Weill, B. Information Technology for the Health Professions (3rd Edition). Prentice Hall, 2008. ISBN-13: 978-0131599338

- **Web Site Readings**  
Electronic Health Records Vendor Comparison  
<http://www.ehr-software.net/comparison.htm>  
(Retrieved July 27, 2012)

### **Table/Topics & Assignments**

#### **Types of Assignments:**

Lecture -

Considered Lecture Hours

#### **Classroom Discussion -**

Considered Lecture Hours In

#### **Class Critique -** Considered

Lecture Hours

#### **Delivering Oral Presentations -**

Considered Lecture Hours In

#### **Class (IC) Exercise -**

Considered Lecture Hours

#### **Reading -**

Considered Homework (HW), work done outside of class

#### **WebClass lesson (non-online courses) -**

Considered HW, work done outside of class

#### **Lab Work -**

Considered Lab Hours

#### **Quiz, Midterm or Final -**

Considered Lecture Hours

<b>Session 1</b>						
<b>Type</b>	<b>Topic/Description</b>	<b>LEC Hours</b>	<b>LAB Hours</b>	<b>HW Hours</b>	<b>Point Value</b>	<b>Due</b>
LEC 1A	Introduction to Health Care Information	2	0	0	0	
LEC 1B	Introduction to Commercial Health Care Information Systems and Their Uses	2	0	0	0	
IC EX 1A	Case Study 1	1	0	0	25	Session 2
HW 1A	Wager, Lee & Glaser, Chapter 1	0	0	5	0	
HW 1B	Weekly Thesis Assignment 1	0	0	10	50	Session 3
HW 1C	Team Project Report Preparation	0	0	7	100	Session 8
HW 1D	Team Presentation Preparation	0	0	4	60	Session 9-10
ICEX 1B	In-class Participation	0	0	0	20	Session 3
HW 1F	Curricular Practical Training Activities	0	0	10	80	Session 8
Total Session 1		5	0	36	335	

Session 2						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 2A	Health Care Data Quality	2	0	0	0	
LEC 2B	Health Care Information Regulations, Laws, & Standards.	2	0	0	0	
IC EX 2A	Case Study 2	1	0	0	25	Session 3
HW 2A	Wager, Lee & Glaser, Chapters 2, 3	0	0	5	0	
ICEX2B	In-class Participation	0	0	0	20	Session 2
Total Session 2		5	0	5	45	
Session 3						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 3A	Current Use of Clinical Information Systems	2	0	0	0	
LEC 3B	Emerging Use of Clinical Information Systems	2	0	0	0	
IC EX 3A	Case Study 3	1	0	0	25	Session 4
HW 3A	Wager, Lee & Glaser, Chapter 5	0	0	4	0	
HW 3B	Weekly Thesis Assignment 2	0	0	10	50	Session 5
ICEX3B	In-class Participation	0	0	0	20	Session 3
Total Session 3		5	0	14	95	
Session 4						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 4A	System Acquisition	2	0	0	0	
LEC 4B	System Implementation & Support	2	0	0	0	
IC EX 4A	Case Study 4	1	0	0	25	Session 5
ELP 4A	Wager, Lee & Glaser, Chapters 6, 7	0	0	6	0	
IC EX 4B	In-class Participation	0	0	0	20	Session 4
Total Session 4		5	0	6	45	
Session 5						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 5A	Technologies That Support Health Care Information Systems	3	0	0	0	

IC EX 5A	Case Study 5	1	0	0	25	Session 6
HW 5A	Wager, Lee & Glaser, Chapter 8	0	0	5	0	
HW 5B	Weekly Thesis Assignment 3	0	0	10	50	Session 7
EXAM 5A	Prepare for Mid-Term	1	0	0	0	
IC EX 5B	In-class Participation	0	0	0	20	Session 5
Total Session 5		5	0	15	95	
<b>Session 6</b>						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 6A	Health Care Information Standards	1	0	0	0	
LEC 6B	Security of Health Care Information Systems	2	0	0	0	
IC EX 6A	Case Study 6	1	0	0	25	Session 7
HW 6A	Wager, Lee & Glaser, Chapters 9, 10	0	0	5	0	
EXAM 6A	Midterm Exam	1	0	0	100	
IC EX 6B	In-class Participation	0	0	0	20	Session 6
Total Session 6		5	0	5	145	
<b>Session 7</b>						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 7A	Organizing Information Technology Services	3	0	0	0	
IC EX 7A	Case Study 7	2	0	0	25	Session 8
HW 7A	Wager, Lee & Glaser, Chapter 11	0	0	4	0	
HW 7B	Weekly Thesis Assignment 4	0	0	10	50	Session 9
HW 7C	Curricular Practical Training Assignment	0	0	0	0	Session 8
IC EX 7B	In-class Participation	0	0	0	20	Session 7
Total Session 7		5	0	14	95	
<b>Session 8</b>						
Type	Topic/Description	LEC Hours	LAB Hours	HW Hours	Point Value	Due
LEC 8A	Assessing & Achieving Value in Health Care Information Systems	2	0	0	0	

LEC 8B	Open Source & Commercial Health Care Information Systems	2	0	0	0	
IC EX 8A	Case Study 8	1	0	0	25	Session 9
HW 8A	Wager, Lee & Glaser, Chapter 15 Handouts	0	0	5	0	
IC EX 8B	In-class Participation	0	0	0	20	Session 9
Total Session 8		5	0	5	45	
<b>Session 9</b>						
<b>Type</b>	<b>Topic/Description</b>	<b>LEC Hours</b>	<b>LAB Hours</b>	<b>HW Hours</b>	<b>Point Value</b>	<b>Due</b>
EXAM 9A	Prepare for Final	5	0	0	0	
Total Session 9		5	0	0	0	
<b>Session 10</b>						
<b>Type</b>	<b>Topic/Description</b>	<b>LEC Hours</b>	<b>LAB Hours</b>	<b>HW Hours</b>	<b>Point Value</b>	<b>Due</b>
EXAM 10A	Final Exam	5 1	0	0	100	
Total Session 10		5	0	0	100	

### Course Hours Summary

Session	Topic	LEC Hours	LAB Hours	HW Hours
1	Introduction to Health Care Information & Commercial Health Care Information Systems	5	0	36
2	Health Care Data Quality, Information Regulations, Laws, & Standards	5	0	5
3	Current & Emerging Use of Clinical Information Systems	5	0	14
4	System Acquisition, Implementation & Support	5	0	6
5	Technologies That Support Health Care Information Systems	5	0	15
6	Health Care Information Standards & Security Systems	5	0	5
7	Organizing Information Technology Services	5	0	14
8	Health Care Information Systems: Assessing & Achieving Value, & Open Source & Commercial Systems	5	0	5
9	Team Project Report & Presentations	5	0	0
10	Team Project Report & Presentations	5	0	0
Total		50	0	100

**Table/Point Breakdown**

<b>Session</b>	<b>Assignment</b>	<b>Possible Points</b>	<b>Percent of Grade</b>
1,3,5,7	Weekly Thesis Assignments 1-4	200	20%
1-8	Case Studies 1-8	200	30%
1	Team Project Report	100	10%
1	Team Project Presentation	60	6%
6	Mid-Term Exam	100	10%
10	Final Exam	100	10%
1-8	In-class Participation	160	16%
8	Curricular Practical Training Activities	80	8%
Total		1000	100%

## **Weekly Thesis Assignments**

The primary purpose of the Weekly Thesis Assignments is to prepare each graduate student at Coleman University for the final Master's Thesis.

Each week, students will submit additional progress toward his or her chosen thesis topic. Progress toward the thesis will include a minimum of three (3) pages of new content toward the thesis and cite no fewer than three (3) scholarly sources.

Each weekly submission should include a highlighted section indicating the new content from the previous week. New content could either be completely new material, or revision to existing material based on feedback provided by your Thesis Mentor or Teaching Assistant.

At the end of Week 3, each student will provide an in-progress review submission to his or her Thesis Mentor via WebClass in the Thesis In Progress section. The Thesis Mentor will provide feedback regarding the framework and approach each student is taking and provide general guidance regarding completion. This in addition to the Weekly Thesis Assignment submission is graded by the course Teaching Assistant.

## **Your Grades for this Course**

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

## Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	A	4
90-93	A-	3.67
87-89	B+	3.33
84-86	B	3
80-83	B-	2.67
77-79	C+	2.33
74-76	C	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend	
CR = Credit	NC = No Credit
I = Incomplete	W = Course Withdrawal
AU = Audit	TR = Transfer Credit
WV = Waiver	

## Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at [ada@coleman.edu](mailto:ada@coleman.edu). The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.