

Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.

COURSE SYLLABUS

INFO 545

HEALTH CARE INFORMATION SYSTEMS AND INTEGRATED TECHNOLOGIES

COURSE DESCRIPTION

This advanced course will examine the relevant and emerging information systems and technologies that exist in the health care industry. Using a broad examination of health care technologies, areas include the health care systems development life cycle, scalable computing, information security, systems analysis, systems design, and systems implementation. Students will learn health care information systems strategy and innovation that is essential to meet the quickly changing needs of effective and efficient health care delivery and services.

RATIONALE

The purpose of this course is to introduce the fundamental management concepts, system architectures, industry standards, and common business needs for information systems in healthcare. Health care is a complex industry that is both highly regulated and technology driven. Future leaders must develop a working understanding of the core information systems and the principles that govern these systems in order to lead safe and effective health care organizations.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the [Academic Course Catalog](#).

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <http://bookstore.mbsdirect.net/liberty.htm>

III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

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

- A. Discuss the relevance of course material and the use of health care informatics to a biblical worldview.
- B. Examine health care record systems.
- C. Evaluate scalable health information systems to identify how integrative applications are developed across varying health care information technologies.
- D. Design an elastic health care information system based upon dynamic and innovative health care information technology needs.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations
- B. Course Requirements Checklist

After reading the Course Syllabus and [Student Expectations](#), the student will complete the related checklist found in Module/Week 1.

- C. Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student will create a thread in response to the provided prompt for each forum. Each thread must be at least 500 words, demonstrate course-related knowledge, and include at least 2 scholarly research articles and 1 biblical integration citation in current APA format. In addition to the thread, the student will reply to at least 1 other classmate's thread. Each reply must be at least 450 words and include at least 1 scholarly research article and 1 biblical integration citation in current APA format.

- D. Written Assignments (6)

For each Written Assignment, the student will write a research-oriented paper in current APA format. Each paper must include at least 5 scholarly references in addition to the course textbook, and must be at least 1,500 words (not including the title or reference pages).

- E. Final Project

For the Final Project, the student will configure a virtual machine using Oracle's free VM VirtualBox platform with an approved Liberty Windows Server image. The student will install a free and open source Electronic Medical Record system (OpenEMR). The final project will be submitted in 3 phases.

- F. Final Project - Reflection Paper

The student will write a reflection paper of at least 500 words describing his or her final project experience. The paper must be in current APA format.

G. Quizzes (3)

Each quiz will cover the Reading & Study material for the module/week in which it is assigned, as well as the preceding modules/weeks that the student has not already been quizzed on. Each quiz will be open-book/open-notes, contain 15 multiple-choice and/or multiple-answer questions, and have a 1-hour time limit.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist	10
Discussion Board Forums (2 at 40 pts ea)	80
Written Assignments (6 at 75 pts ea)	450
Final Project	
Phase 1	100
Phase 2	125
Phase 3	125
Final Project - Reflection Paper	30
Quizzes (3 at 30 pts ea)	90
Total	1010

B. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859
 C+ = 820–839 C = 780–819 C- = 760–779 F = 0–759

C. Quizzes/Tests/Exams

For timed quizzes/tests/exams, the student is required to complete the quiz/test/exam within the assigned time. For the student who exceeds this time limit, a penalty of 1 point will be deducted for each minute, or part thereof, he/she exceeds the assigned time limit.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

COURSE SCHEDULE

INFO 545

Textbook: Moutzoglou & Kastania, *Cloud Computing Applications for Quality Health Care Delivery* (2014).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Moutzoglou & Kastania: chs. 1–2 1 presentation	Course Requirements Checklist Class Introductions DB Forum 1 Written Assignment 1	10 0 40 75
2	Moutzoglou & Kastania: chs. 3–4 1 presentation	Written Assignment 2 Quiz 1	75 30
3	Moutzoglou & Kastania: chs. 5–6 1 presentation	Written Assignment 3	75
4	Moutzoglou & Kastania: chs. 7–8 1 presentation	Final Project - Phase 1 Quiz 2	100 30
5	Moutzoglou & Kastania: chs. 9–10 1 presentation	Written Assignment 4	75
6	Moutzoglou & Kastania: ch. 11 1 presentation	Written Assignment 5 Final Project - Phase 2	75 125
7	Moutzoglou & Kastania: chs. 12–13 1 presentation	DB Forum 2 Written Assignment 6	40 75
8	Moutzoglou & Kastania: chs. 14–15 1 presentation	Final Project - Phase 3 Final Project - Reflection Paper Quiz 3	125 30 30
TOTAL			1010

DB = Discussion Board

NOTE: Module/Week 1 begins on Monday at 12:00 a.m. (ET) and ends Friday night at 11:59 p.m. (ET).
Modules/Weeks 2-8 begin on Saturday morning at 12:00am. (ET) and end on Friday night at 11:59 p.m. (ET).