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 <u>not</u> be used to purchase course materials.

COURSE SYLLABUS

INFO 305
QUALITY MANAGEMENT AND DECISION SUPPORT

COURSE DESCRIPTION

Focused on improving the quality of patient care, this course will focus on quality management techniques and related decision-support practices. The evaluation of the impact of Computerized Provider Order Entry (CPOE) on the quality, safety, and efficiency of health care data will be explored. Students will apply decision modeling techniques, incorporating comparative analysis, simulation, optimization, and decision analysis designed to increase the efficiency and effectiveness of decision support within the healthcare system.

RATIONALE

Organizations must have leaders who possess the knowledge, skills, and abilities necessary to design, implement, and regulate quality management and decision support systems. Such systems are utilized daily in analyzing and managing organizational knowledge. If organizational knowledge is leveraged effectively, the organization will be more likely to achieve its strategic mission in the most efficient way.

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.   Blackboard recommended browsers

D.   Microsoft Office

IV.   MEASURABLE LEARNING OUTCOMES

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

A.   Integrate a biblical worldview within informatics.

B.   Apply decision-modeling techniques, incorporating comparative analysis, simulation, optimization, and decision analysis designed to increase the efficiency and effectiveness of decision support.

C.   Acquire the skills necessary to contribute to strategic and tactical planning in utilizing health information systems.

D.   Evaluate the impact of order entry on the quality, safety, and efficiency of health care data.

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 (5)

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 300 words and demonstrate course-related knowledge. In addition to the thread, the student will reply to the threads of at least 2 classmates. Each reply must be at least 150 words. Each thread and reply must include a Scripture reference and at least 1 citation in current APA format.

D.   Case Study Discussion Board Forums (3)

The student will participate in Case Study Discussion Board Forums in order to generate discussion, interact with each case study, and reflect on classmates' perspectives. The student will submit a thread of at least 500 words in response to the assigned case study. The student will then submit replies of at least 150 words each to the threads of at least 2 classmates. Each thread and reply must include at least 1 scholarly resource cited in current APA format, at least 1 Scripture reference, and an integration of biblical principles.

E.   Collaborative Group Project

This assignment consists of the following 3 parts:

    1. Annotated Bibliography

The student will be placed into a group for the Collaborative Group Project. Part 1 requires each group of students to research 15 scholarly articles from peer-reviewed journals to establish research for Part 3 of the Collaborative Group Project. The student will use a provided template to annotate each source. Proper current APA formatting must be used. One member of the group will submit the final version of the Annotated Bibliography.

2. Outline

Each group of students will complete a full-sentence outline in preparation for Part 3 of the Collaborative Group Project. The outline will include a thesis statement, the research question(s)/issue(s) being answered/addressed, how much space will be allotted for each section of the paper, and a preliminary reference list of at least 15 sources. One member of the group will submit the final version of the Outline.

3. Final Document

Each group of students will be responsible for constructing and reviewing the final document. The student will work collaboratively on a 10–15-page paper in current APA format, complying with the formatting and content instructions. The topic of the paper will be selected individually by the group but will focus on a current issue concerning the use of health informatics in quality management and decision support within the healthcare industry. The student must contribute weekly to the group's discussion about this paper in the Group Discussion Board Forum. One member of the group will submit the final version of this assignment.

F. Quizzes (5)

The student will complete 5 quizzes. Each quiz will cover the Reading & Study material for the assigned module(s)/week(s). Each quiz will be open-book/open-notes, contain 20 multiple-choice questions, and have a time limit of 1 hour.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist	10
Discussion Board Forums (5 at 50 pts ea)	250
Case Study Discussion Board Forums (3 at 75 pts ea)	225
Collaborative Group Project	
Annotated Bibliography	100
Outline	100
Final Document	125
Quizzes (5 at 40 pts ea)	200
Total	1010

B. Scale

A = 900–1010   B = 800–899   C = 700–799   D = 600–699   F = 0–599

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 Accommodation Support (ODAS) at
LUOODAS@liberty.edu to make arrangements for academic accommodations.
Further information can be found at www.liberty.edu/disabilitysupport.

If you have a complaint related to disability discrimination or an accommodation
that was not provided, you may contact ODAS or the Office of Equity and
Compliance by phone at (434) 592-4999 or by email
at equityandcompliance@liberty.edu. Click to see a full copy of
Liberty's Discrimination, Harassment, and Sexual Misconduct Policy or
the Student Disability Grievance Policy and Procedures.

COURSE SCHEDULE

INFO 305

Textbooks: Brown et al., *Health Informatics: A Systems Perspective* (2013).
Nelson & Staggers, *Health Informatics: An Interprofessional Approach* (2018).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Brown et al.: ch. 10 Nelson & Staggers: chs. 1–2, 35 1 presentation	Course Requirements Checklist Class Introductions DB Forum 1 Quiz 1	10 0 50 40
2	Brown et al.: ch. 1 Nelson & Staggers: chs. 3–5 1 presentation	DB Forum 2 Quiz 2	50 40
3	Brown et al.: ch. 2; Case Study: A Problem of Display Codes (p. 35) Nelson & Staggers: chs. 21–24 1 presentation	Case Study DB Forum 1 CGP: Annotated Bibliography Quiz 3	75 100 40
4	Brown et al.: ch. 13 Nelson & Staggers: chs. 25–26 1 presentation	DB Forum 3	50
5	Brown et al.: ch. 4 Nelson & Staggers: ch. 3, 10 1 presentation	DB Forum 4 CGP: Outline Quiz 4	50 100 40
6	Brown et al.: chs. 5–6; Case Study: Project IMPACT - Clinical Decision Support in Critical Care (p. 104) 1 presentation	Case Study DB Forum 2	75
7	Brown et al.: chs. 8–9; Case Study: Knowledge Management in Accountable Care Organizations (p. 172) 1 presentation	Case Study DB Forum 3 CGP: Final Document	75 125
8	Nelson & Staggers: chs. 16, 19–20 1 presentation	DB Forum 5 Quiz 5	50 40
		TOTAL	1010

DB = Discussion Board
CGP = Collaborative Group Project

NOTE: Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.