COURSE INFORMATION FORM

DISCIPLINE
Health Information Management

COURSE TITLE
HIM 112 Database for Health Information

CR.HR 2  LECT HR. 1  LAB HR. 2  CLIN/INTERN HR.  C CLOCK HR. 

CATALOG DESCRIPTION

Students will become familiarized with database concepts and the ability to store, retrieve, and process information. This course is designed to familiarize the student with entry level database models commonly used in healthcare. The course will be presented on three levels: concepts, procedures and activities.

PREREQUISITES
Formal admission into the HIM program, HLSC 108 or BIOL 109 or BIOL 110 and BIOL 210, ENGL 101, HIM 100

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

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

1. Design an Access database related to health information.
2. Demonstrate a database query.
3. Explain analytics and decision support and apply report generation technologies to facilitate decision making.
4. Collect and maintain health data and apply policies and procedures to ensure the accuracy and integrity of the data.

GENERAL EDUCATION OUTCOMES (ESO)

Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>ESO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Utilize specialized software in completion of HIM processes and explain policies and procedures of networks to facilitate clinical and administrative applications.
2. Apply policies and procedures to ensure the accuracy and integrity of health data both internal and external to the health system.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Assignments (1, 2, 4)
2. Lab exercises (changed from class discussions) (1, 2, 4)
3. Examinations(3, 4)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Introductory Database Concepts
   A. The integrated database environment
   B. Roles in the integrated database environment
   C. Advantages and disadvantages of the integrated database approach
   D. Historical developments in information systems

II. Database Planning and Database Architecture
   A. Data as a resource
   B. Characteristics of data
   C. Stages in database design
   D. Design tools
   E. Database administration
   F. Overview of data models

III. The Relational Model
   A. History of the relational model
   B. Advantages of the relational model
   C. Relational data structures
   D. Integrity constraints
   E. Views

IV. Relational Database Management Systems
   A. Architecture of a relational database management system
   B. Protecting data integrity with constraints and triggers
   C. Creating and using views

V. The Object-Oriented Model
   A. Rationale for the object-oriented model
   B. Object-oriented data concepts
   C. Object Query Language

VI. Introduction to Database Security
   A. Issues in database security
   B. Physical security and user authorization
   C. Authorization
   D. Access control
   E. Using views for access control
F. Database security and the Internet

VII. Transaction Management
   A. Properties of transactions
   B. Need for concurrency control
   C. Locking
   D. Need for recovery

VIII. Social and Ethical Issues
   A. Computerization and ethical issues
   B. Intellectual property
   C. Privacy issues
   D. Human factors