Southeast Missouri State University

Department of Management and Marketing

Title of Course: Healthcare Database Systems

Course No.: HA545

New: Spring 2014

I. Catalog Description and Credit Hours of Course:
A study of the design of databases used in healthcare. Types of database architectures, normalization techniques, file and access techniques, query, and update languages, data integrity, use of health record systems, and applications of databases to support the healthcare system. (3)

II. Prerequisite(s): MI375 with a minimum grade of ‘C’ and either MG301 or HA300 with a minimum of ‘C’

III. Purposes or Objective of the Course:
A. Use database and modeling concepts to discuss healthcare database concepts
B. Describe and model information-based health management processes
C. Use database and modeling concepts to design and develop a fundamental healthcare database
D. Analyze data generated from a healthcare information system
E. Discuss coding schemes and their implications for data integration and management
F. Discuss HIPAA and its implications for record storage and management

IV. Student Learning Outcomes (Minimum of 3)

Upon completion of this course students should be able to:
A. Discuss database concepts and terminology in general and as they relate to healthcare information systems;
B. Identify and model the data and workflow of a healthcare process;
C. Design and develop a fundamental healthcare database;
D. Discuss health care coding, HIPAA, and security as it relates to healthcare system.

V. Expectations of Students:
A. Demonstrate an understanding of healthcare information systems and their integration, database design and development fundamentals, data acquisition and analysis, system integration, and data regulation and security issues as they relate to access and storage.
B. Spend sufficient time outside of class preparing for class and completing assignments.
C. Attend all class meetings. Participate in class discussion and problem presentation. Advance preparation is necessary. Students are expected to read and study the text in detail. Students are responsible for all assigned material.
D. Complete a significant research project/paper if enrolled for graduate credit

VI. Course Content or Outline:
A. Introduction to Health Systems Delivery and Information Systems 6 hrs
B. Health Information Professionals 3 hrs
C. Accreditation, Regulation and HIPAA 5 hrs
D. Process and Data Modeling 3 hrs
E. Health Care Records 3 hrs
F. Database Fundamentals 3 hrs
G. Database Design and Development 6 hrs
H. Healthcare Data Acquisition and Analysis 3 hrs
I. Organization, Storage, and Management of Health Records 3 hrs
J. Electronic Health Records 3 hrs
K. Auxiliary Health and Practice Management Information Systems 3 hrs
L. Exams 4 hrs
Total 45 hrs

VII. Textbook(s) and/or Other Required Materials or Equipment:


VIII. Basis for Student Evaluation

A. Performance on scheduled exams
B. Performance on group project
C. Performance on case assignments
D. Performance on final paper
E. Performance in class discussions
F. Performance on a research project/paper or computer projects (graduate student requirement)

IX. Grading Scale

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Graduate</th>
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<tbody>
<tr>
<td>90 – 100% = A</td>
<td>90 – 100% = A</td>
</tr>
<tr>
<td>80 – 89.99% = B</td>
<td>80 – 89.99% = B</td>
</tr>
<tr>
<td>70 – 79.99% = C</td>
<td>70 – 79.99% = C</td>
</tr>
<tr>
<td>60 – 69.99% = D</td>
<td>&lt;70% = F</td>
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<tr>
<td>&lt;60% = F</td>
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The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the semester.

X. Academic Policy Statement:
Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to: http://www6.semo.edu/judaffairs/code.html

XI. Student with Disabilities Statement:
If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable