COURSE NUMBER: ISTM 4121

COURSE TITLE: Database Principles and Applications

COURSE DESCRIPTION: Database Principles and Applications covers topics including relational database theory, entity-relationship diagrams, and using data and information to solve business problems. Students will design and create entity-relationship diagrams as well as design a system using a relational database management system.

PREREQUISITES: ISTM 3119, CSCI 1111

CONTACT HOURS: Students will spend 2.5 hours per week in class. Out of class, they will spend an average (per week) of 1.5 hours reading and 4.5 hours working on computer assignments and projects. Over the course of the semester, students will spend 35 hours in instructional time and 85 hours on their assignments and preparing for class. Instructional time includes discussions and hands-on activities in class.

PROFESSOR: Mary J. Granger
Department of Information Systems and Technology Management
Office: 515 Funger Hall
Office Hours: Tuesdays (12:00 – 3:00 PM) and by appointment by email.
Phone: (202)-994-7159
E-mail: granger@gwu.edu

LEARNING OBJECTIVES: Students will:
• Identify data and information needed to solve a business problem
• Design and create Entity-Relationship Diagrams
• Understand Relational Database Theory
• Convert Entity-Relationship Diagrams to a physical representation
• Design a system using a relational Database Management System
• Enhance their communication skills

READINGS & MATERIALS: Required: Hoffer, Ramesh and Topi Modern Database Management Addison-Wesley Publisher, 11th edition
Recommended: Any ACCESS book

GRADING:
• In-class and homework assignments (20%)
• Three Exams (15% each)
• Comprehensive team project (35%)
ASSIGNMENTS: Assignments will be based on material covered in lectures and the text. There will be in-class assignments. In-class assignments are expected to be hand-written, but homework assignments expected to be either typed or drawn with an appropriate tool. You may download diagrams from LucidChart and cut and paste them into Word. **Homework assignments are due in class at the start of class and must be posted on BlackBoard by 4:00 pm. Late assignments will not be accepted.** If you are away and cannot attend class you are still required to submit your assignment on time. Assignments will be returned 1-2 weeks after they are submitted, and grades will be posted on Blackboard. Please check the Blackboard grade book to see whether these grades are correct. **Questions regarding grading and grades posted should be addressed in writing within a week after the grades are posted.**

Rubric for grading assignments:
1. In-class assignments
   a. Teams for the day will be assigned
   b. Each team submits 1 solution with all the names of the team members.
   c. Each member receives 1 point for the in-class assignment
   d. If you are not in class, you will not receive any points.

2. Homework assignments
   a. All homework assignments are to be done individually
   b. You may discuss the homework with others, but the final submission must be yours.

Project:
The project will be assigned no later than February 8th, earlier if possible. If you have a real-world database project that you would like to solve, please see me for approval. Each team is also expected to test their projects on the available equipment BEFORE the final presentation day. The project is evaluated on functionality, user interface (functionality not glitziness), user manual and technical documentation. There are examples from other semesters in my office and on Blackboard. Documentation receives equal credit to the final working database.

ACADEMIC INTEGRITY:
The code of academic integrity applies to all courses in the George Washington School of Business. Please become familiar with the code. All students are expected to maintain the highest level of academic integrity throughout the course of the semester. Please note that acts of academic dishonesty during the course will be prosecuted and harsh penalties may be sought for such acts. Students are responsible for knowing what acts constitute academic dishonesty. The code may be found at: [http://www.gwu.edu/~ntegrity/code.html](http://www.gwu.edu/~ntegrity/code.html)

UNIVERSITY POLICIES: Religious Accommodation

Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities.
Disability Support Services (DSS)

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: wired.gwu.edu/dss/

Mental Health Services 202-994-5300

The University's Mental Health Services offers 24/7 assistance and referral to address students’ personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. counselingcenter.gwu.edu/