COLLIN COLLEGE

COURSE SYLLABUS

Course Information

Course Number: ITSE 2347

Course Title: Advanced Database Programming

Course Description: Database development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. Additionally, Advanced SQL Query Design, SQL Analytic functions, Database design, and Data Warehousing will be emphasized.

Course Credit Hours: 3
Lecture Hours: 3
Lab Hours: 1

Prerequisite: ITSE 2309

Student Learning Outcomes:

- **State-mandated Outcomes:** Upon successful completion of this course, students will:
  1. Develop complex database applications using a structured query language.
  2. Implement security and error trapping.
  3. Develop menu-driven database systems.
- **Additional Collin Outcomes:**
  1. Design advanced SQL queries for business applications.
  2. Use SQL analytic functions for business intelligence analysis & reporting.
  3. Create ER Diagram from customer requirements.
  4. Design a database from ER Diagram.
  5. Design a data warehouse using a star schema,

Secretary's Commission on the Acquisition of Necessary Skills (SCANS) - SCANS skills are a group of foundational skills and workplace competencies that the Secretary's Commission on the Acquisition of Necessary Skills established as vitally important for workplace success in the 21st century. In Collin's workforce programs, the SCANS skills are developed and reinforced throughout the curriculum to provide students with an opportunity to hone these skills/competencies in the context of their education. Over the course of an entire degree program, the successful student is expected to demonstrate all of the SCANS skills and competencies as part of their education. The SCANS Foundation Skills and Workplace Competencies are described at:
http://www.collin.edu/academics/programs/Workforce_SCANS_Skills_Syllabi_Code_Key.pdf

Withdrawal Policy: See the current *Collin Registration Guide* for last day to withdraw.

Collin College Academic Policies: See the current *Collin Student Handbook.*

Americans with Disabilities Act Statement: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.