Course Description
This course introduces database models and the fundamentals of database design. Topics include database structure, database processing, and application programs which access a database.
3 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus
This course is designed to provide the student with basic knowledge of the fundamentals of database design and models.

Text and References
Text: Database Concepts by Kroenke and Auer
Publisher: Pearson; 6th Edition
ISBN: 0-13-274292-6

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives.
1. identify the elements of a database
2. explain the purpose of a database management system (DBMS)
3. open existing tables, queries, forms, and reports
4. creating tables, queries, forms, and reports
5. navigating existing tables, queries, forms, and reports
6. understand basic relational terminology
7. create keys
8. enforce referential integrity
9. apply the normalization process
10. explain functional dependency
11. write SQL statements for creating database structures
12. create SQL SELECT statements
13. write SQL statements for modifying and deleting data, tables, and constraints
14. understand the purpose of views
15. write SQL statements for creating and using views
16. understand the basic stages of database development
17. understand the purpose and role of data models
18. construct ER diagrams
19. validate data models
20. transform ER data models into relational designs
21. explain the need for denormalization
22. create joins using SQL statements
23. explain recursive relationships
24. apply basic administrative and managerial database administrator (DBA) functions
25. know the meaning of ACID transaction
26. understand the need for concurrency control, security, and backup and recovery
27. set up Web database processing
28. apply basic Extensible markup Language (XML) concepts
29. explain business intelligence
30. apply Online Analytical Processing (OLAP) and data mining concepts
31. back up a database
32. restore a database
33. compact a database

**Student Contributions**
Each student will spend approximately 3 hours preparing for class and completing assignments. Students will turn in assignments and complete tests as specified on Blackboard. Students will also complete a final exam/project to demonstrate their knowledge of the material. Students needing assistance with assignments should contact the course instructor.

**Course Evaluation**
Final grades for this course are calculated as follows:
- Tests: 40%
- Assignments: 40%
- Final Exam/Project: 20% *(Note: A student must take the final exam in order to earn a non-withdrawal grade.)*

**Course Schedule**
The schedule for this course is provided on Blackboard.
ADA Statement
The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

Attendance
1. The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.
2. Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
3. Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
4. Reinstatement requires the signature of the division dean.
   a. In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
   b. When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance or
   c. Under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
   d. Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
   e. A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

Hazardous Weather
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTTC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty, and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

Academic Misconduct
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student’s responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.