CPT 240
INTERNET PROGRAMMING WITH DATABASE

Course Description
This course is a study of the implementation of databases utilizing current server-side technologies.
Prerequisite: CPT 101 or CPT 170.
3 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus
Upon completion of this course, the student shall have capabilities and understanding of the following areas:
1. Install and configure a Web server with SQL database
2. Work with databases and SQL
3. Manipulate SQL databases with stored queries and procedures
4. Save state information in databases for web pages
5. Understand arrays and their usage in databases.

Text and References
MCTS Exam 70-433. Microsoft SQL Server 2008 - Database Development self-paced Training Kit

Online Students should have access to a computer running Windows 2000 or later with internet access. You should be able to load Microsoft SQL Server software on your computer at home so you have the sql developer environment to complete your class assignments and homework. If you are taking this as an online course, you should have web access and be able to send in homework via email. If you don’t have the tools, you will need to find a computer that has them (e.g., you can go to the TCL Learning Resource Center).

To access the class web site:
Go to: elearning.tcl.edu or www.tcl.edu
Click on the Blackboard logo (you might need to scroll down on the web page)
Enter your login and password

Your Blackboard User Name is as follows:
Username: _______________________
Your seven-digit TCL Student ID number including the proceeding zeroes.
Example: 0012345
Your new Blackboard Password is as follows:

Password:________________________

First letter of your first name, lowercase, and the last three digits of your social security number.
Example: j123
NOTE: Use lowercase letter and without spaces.

Click on class cpt240
If you cannot get to the site, please call the helpdesk 525 8344 or email them at helpdesk@tcl.edu.

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. load MS SQLserver software
2. review www history
3. set relationships
4. describe object db
5. describe relational db
6. define foreign key
7. define primary key
8. review db theory
9. list dbmgt systems
10. define query
11. list dbms commands
12. use SELECT statement
13. use JOIN statement
14. attach database
15. open SQL svr management studio
16. find database files
17. use SQL svr management studio
18. define aggregate queries
19. define database
20. define clients
21. define web servers
22. execute query
23. use db commands
24. insert data
25. update data
26. delete data
27. define stored procedures
28. combine datasets
29. manage site info
30. access query results
31. define data types
32. describe normalization
33. handle sql errors
34. write accessor fns
35. retrieve records  
36. grant privileges  
37. create users  
38. create db  
39. connect db  
40. set permissions  
41. design db  
42. define tables  
43. load dbms  
44. describe SQL  
45. execute sql statements

**Student Contributions**

Each student will spend approximately 2.5-5 hours per week preparing for class and completing assignments to turn in weekly. Each week students will turn in assignments as specified on Blackboard. In addition, chapter tests are to be completed as assigned. Students will also complete a final exam/project to demonstrate their knowledge of the material.

Students will use a developer environment on a TCL computer or they will set up the development environment on their own computers. Students will be expected to write sql queries and use the sql management studio and demonstrate them.

**Course Evaluation**

Each week's assignments are worth 100 points and averaged over the semester. Chapter tests are also worth 100 points and averaged at the end of the semester. The final will be 100 points.

Tests: 45%  
Homework: 40%  
Final: 10%  
Timeliness/Attendance/Participation: 5%

**Course Schedule**

The class can be taken online or as a web-enhanced class that meets 1.5 hours per week. We will cover the information in the order of the content goals as listed.

Approved by: Kenneth Flick  
Developed/Revised: 12-16-2011  
Ken Flick, Division Dean for Business/Industrial Division
**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.

**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.

**Attendance**
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.

- 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. Reinstatement requires the signature of the division dean.
- 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. Reinstatement requires the signature of the division dean.
- 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.
- 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**
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.

- 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.
- 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, WTOC 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

Emergency Text Message Alert
Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on “emergency Text Alert at TCL” and fill out the form or go to www.tcl.edu/textalert.asp