PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

SQL APPLICATIONS USING ORACLE
CSIT 2425 (formerly CST 2425)

Class Hours: 3.0   **Credit Hours: 4.0**

Laboratory Hours: 3.0   **Revised: Fall 05**

 NOTE: This course is not designed for transfer credit.

Catalog Course Description:

A comprehensive study of SQL using the Oracle relational database management system. Hands-on training will include the use of SQL*PLUS, database creation, data queries, view definition and use, operators and functions, security, calculation, indexing, utilities, and data transport.

Entry Level Standards:

The student should be able to use a standard keyboard and maintain 28 words per minute error-free typing rate. The student must have math, writing, verbal and English language skills at the college entry level.

Prerequisites:

CSIT 1810 and one programming course

Textbook(s) and Other Course Materials:

Oracle Database 10g: SQL, by, Jason Price, McGraw-Hill, 2004.
Oracle Database 10g: The Complete Reference, by Kevin Loney, McGraw-Hill, 2004.

I. Week/Unit/Topic Basis:

Week	Topic
1	Introduction/review, relational and object-oriented databases, normalization
2-3	Oracle overview, basic SQL*Plus, basic SQL, table creation & modification
4	Joining tables
5	Sub-queries, joins
6-7	Table creation & modification, inserting and modifying data, constraints
8	Views, indexes, sequences, record locks
9-11	Single-row functions, group functions
12	Advanced queries, formatted output, SQL *Plus reports
13-14	PL/SQL language, data manipulation, transaction control, data types, Cursors, exceptions, triggers, procedures, functions, packages

II. Course Objectives*:

A.   Develop a working understanding of the terminology associated with relational database processing. III, VII, VIII, IX

B.   Become familiar with, have a working knowledge of, and demonstrate efficient use of: SQL and ORACLE. IV, V, VI, VII, VIII, IX, XII

C.   Develop a working relational database and develop restrictive access conditions appropriate for entering, modifying and producing output to an I/O device. III,IV,VI

D.   Provide environmental conditions to provide a user with a working SQL relational database. III, IV

E.   Become familiar with issues related to data access, security, file allocation and process control. III, VII, VIII, IX

*Roman numerals after course objectives reference goals of the CSIT program.

III. Instructional Processes*:

Students will:

1.   Use professional tools to produce software components and documentation. *Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*

2.   Participate in a team using shared resources. *Communication Outcome, Transitional Strategy, Active Learning Strategy*

4.   Use professionally accepted methods and materials in their approach to completion of applications. *Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*

5.   Create database forms and reports based on client input. *Communication Outcome, Technological Literacy Outcome, Transitional Strategy, Active Learning Strategy*

*Strategies and outcomes listed after instructional processes reference TBR's goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1.   Demonstrate proficient use of terminology associated with computers, software and database applications products. A,B,C,D,E

2.   Demonstrate an understanding of the use of hardware, firmware and systems terminology. A,B,C,D,E

3.   Demonstrate effective use of various manuals, documentation, tutorials, on-line directives and guides. A,B,C,D

4.   Demonstrate knowledge and use of major Oracle functions, commands and processes. A,B,C,D,E

5.   Demonstrate proficient use of the keyboard and mouse in accessing programs, data and/or files. A,B,C,D,E

6.   Demonstrate use of major SQL* tools commands and processes. B,D,E

7.   Demonstrate use of all major SQL programming commands and selections. B,D,E

8.   Demonstrate effective use of Oracle as a business tool. A,B,C,D,E

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

A minimum of two tests is recommended. Tests will cover material presented in class. Tests are not to be missed without a valid excuse.

B. Laboratory Expectations:

Lab attendance is required. Assignments will be given and must be completed and handed in at the designated date and time.

C. Field Work:

N/A

D. Other Evaluation Methods:

Class participation, quizzes and homework will also comprise the final grade for the course.

E. Grading Scale:

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93 - 100  A
88 - 92   B+
83 - 87   B
78 - 82   C+
73 - 77   C
65 - 72   D
Below 65 F
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VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. [NOTE: No differentiation is noted for excused/unexcused absences. These will be treated as an absence.] (*Pellissippi State Catalog*)

B. Academic Dishonesty:

Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed through the regular Pellissippi State procedures as a result of

academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. (*Pellissippi State Catalog*)

C. Accommodations for disabilities:

If you need accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Please see the instructor privately after class or in his/her office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127 or 131 or by phone: 694-6751(Voice/TTY) or 539-7153.

D. Other:

Computer Usage Guidelines:
College-owned or –operated computing resources are provided for use by students of Pellissippi State. All students are responsible for the usage of Pellissippi State's computing resources in an effective, efficient, ethical and lawful manner. (Pellissippi State Catalog)

Other:
Plagiarism, cheating, software piracy, non-educational use of computer systems and other forms of academic dishonesty are strictly prohibited. A student caught cheating or infracting specific rules will be given a grade of "F" for the course.

Make-up exams: All exams are required, and make-ups will be allowed only in the rarest of cases. In the event of an emergency, notification of the instructor must be made in advance.