

3 credits

1) *Oracle 10g Programming, A Primer*, Rajshekhar Sunderraman, Addison-Wesley, 2007.

(2) Detailed documents posted on Blackboard

None

Use Oracle 11g to study the Java EE approach to information technology, with emphasis on Web programming. The Oracle JDeveloper 11g IDE will be used for all applications, including SQL, PL/SQL, Java, Web and XML applications

Prerequisites: COP 3530 Data Structures. COT 4703/6726 satisfies the Advanced Content requirement for the BSCS program and can be used as a technical elective in all CS and CE programs.

Investigate Java EE as a modern IT platform.

1. Using Oracle 11g to master the industry standard relational database language SQL.
2. Using Oracle 11g to master PL/SQL, Oracle's procedural extension of SQL. Using PL/SQL to implement stored procedures, stored functions, packages, triggers, and Web programs. The latter is done using the PL/SQL Web Toolkit and PL/SQL Server Pages.
3. Using Java to gain familiarity with object-oriented concepts such as class, inheritance, and polymorphism. Java 1.5 generics and iterators will be covered.
4. Using the object-oriented features of Oracle 11g to gain an understanding of how relational features and object-oriented features can be effectively combined in SQL. Such object-oriented features include user-defined types, row types, methods, collection types (nested tables and arrays), OID references, and type inheritance.