Raritan Valley Community College
Course Outline

CISY 289 – Microsoft SQL Server 2005

I. Basic Course Information

A. Course number and Title: **CISY 289 – Microsoft SQL Server 2005**

B. Date of Proposal: **November 2006**

C. Course Developer: **Steve Schwarz**

D. Sponsoring Department **Computer Science**

E. Semester Credit Hours: **3**

F. Weekly Contact Hours: **4** Lecture __**2**__
  Lab __**2**__

G. Prerequisites: Any Programming Course

H. Laboratory Fees: **Yes, at current rate**

II. Catalog Description

(Prerequisite/s: Any Programming Course; Corequisite/s: None) SQL Server
2005 is Microsoft's enterprise database server. In this hands-on course, students
acquire an overview of SQL server 2005 and learn how to exploit its capabilities.
Students learn the basics of how a relational database works and how to manage
SQL server 2005 with graphical tools and wizards.

III. Statement of Course Need

SQL Server 2005 is the latest version of Microsoft's enterprise database server.
In response to industry demand, this version has been designed to interact with
the .NET Framework, XML, and Web Services. A working knowledge of this
powerful product is necessary to apply and manage the key features of SQL
server and make informed business decisions.

IV. Place of Course in College Curriculum

- Database Certificate Elective
- Required for Microsoft.NET Certificate
- Required for Web Programming Certificate
- Computer Programming Elective
- C.I.S. Elective
- Free Elective

V. Outline of Course Content

This course explores the following topics:

- Introduction to Relational Database Systems and SQL Server 2005
- Overview of SQL
- Interfacing with SQL Server
- Creating, Modifying, Renaming, and Deleting Database Tables
- Modifying Data and Auditing Table Operations
- Querying a Database
- Creating Multiple Queries and Views
- Using SQL Extensions and Stored Procedures
- Creating and Modifying Reports
- Maintaining Database Security
- Database Administration

VI. Educational Goals and Learning Outcomes

A. General Education Goals

After completion of this course, the student will be able to:

1. Use SQL servers for information analysis, problem solving, and decision making (G.E. 3)
2. Apply quantitative reasoning to interpret data and solve problems (G.E. 7)
3. Apply creativity to problem solving; decision making; and quantitative reasoning (G.E. 1, 3, 4, 7)
4. Demonstrate proficiency in the use of an integrated development environment. (G.E. 3)
5. Build communication skills (effective writing and speaking) through collaborative learning, utilizing team projects and multi-tasking.   (G.E. 2, 3, 6)

Student goals for this course:

At the conclusion of the course, students will be able to:
1. Access a database using rudimentary SQL statements.
2. Delete and update table contents using SQL.
3. Design tables using appropriate column names/data types/field sizes
4. Generate scalable stored procedures
5. Successfully secure a database.
6. Identify common SQL administration server tools
7. Describe how to manage users on SQL servers and assign user permissions
8. Migrate data to and from a SQL server

VII. Modes of Teaching and Learning
* Lecture/Discussion
* Student Collaboration
* Computer-Assisted Instruction
* Laboratory

VIII. Papers, Examinations, and other Assessment Instruments
• Computer Projects – In-class and out of class assignments and projects
• Exam – Hands on software exams
• Other – Homework

IX. Grade Determinants
* Homework - The student will complete homework assignments throughout the semester. The assignments will relate to the topics currently being discussed in class.
* Tests - Test questions will be multiple choice, short answer, fill in the blank, true/false, and coding.
* Hands-on Software examinations

X. Text and Materials

Suggested Textbook

Introduction to SQL Server 2005
James T. Perry and Gerald V. Post
Prentice Hall
ISBN 0136133983
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XI. Resources

http://wps.prenhall.com/bp_perry_sql2005_1
http://www.microsoft.com/sql/default.mspx
http://www.sqlteam.com/

http://www.sqlmag.com/