DATE OF LAST REVIEW: 02/2013
CIP CODE: 11.0901
SEMESTER: Departmental Syllabus
COURSE TITLE: SQL Server
COURSE NUMBER: CIST-0226
CREDIT HOURS: 4
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: Departmental Syllabus
EMAIL: Departmental Syllabus

KCKCC-issued email accounts are the official means for Electronically communicating with our students.

PREREQUISITE(S): CIST-0161 System Manager (Windows Server)

REQUIRED TEXT:
Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

COURSE DESCRIPTION:
This course will provide the student with knowledge of SQL Server Software and provide an overview of the application of a relational database. Topics will include platform requirements, distribution architecture and operating system considerations. Software installation and configuration of SQL will be also be performed. Instruction will further include considerations for database building, creating tables, using constraints, indexes and establishing triggers. Additionally, this course will cover security, backup and data restoration. Preparation for Microsoft Exam 70-028(MCSE elective)

METHOD OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:

I. Introduction to SGL
   A. Prerequisites
   B. Course Materials
   C. Terminology
II. SQL Server Platform
   A. Operating System Options
   B. SQL Server Architecture

III. Installation and Enhancing SQL Server
   A. System Requirements
   B. Installations
   C. Installation Verification
   D. Database Application and Considerations
   E. Creating and Managing Relational Databases
   F. Tables and Applications
   G. Constraints
   H. Index Applications
   I. Triggers

IV. SQL Transactions
   A. The Select Statement
   B. Columns
   C. Rows
   D. Search Conditions
   E. Sorting

V. Language Elements
   A. Performing Queries
   B. Joins
   C. Store procedures

VI. SQL Server Web Tools
   A. Generating a Web Page from SQL
   B. Database Administration

VII. Security
   A. Permission Validation
   B. Levels of Security
   C. Data Loss Prevention
   D. Data Recovery
   E. Data Backup

EXPECTED LEARNER OUTCOMES:
A. Upon completion of the course the student will be able to identify course materials and define terminology as related to SQL Server.
B. Upon completion of the course the student will be able to identify SQL Server operating system options and architecture.
C. Upon completion of the course the student will be able to install SQL Server and identify system requirements.
D. Upon completion of the course the student will be able to identify elements required to make SQL transactions.
E. Upon completion of the course the student will be able to identify the language elements of SQL Server.
F. Upon completion of the course the student will be able to identify SQL Server Web Tools.
G. Upon completion of the course the student will be able to identify security procedures as related to SQL Server.

COURSE COMPETENCIES:
Upon completion of the course the student will be able to identify course materials and define terminology as related to SQL Server.

1. Upon completion of the course the student will be able to identify course materials for SQL Server.
2. Upon completion of the course the student will be able to identify terminology as related to SQL Server.
3. Upon completion of the course the student will be able to define terminology as related to SQL Server.
4. Upon completion of the course the student will be able to identify prerequisites as related to SQL Server.

Upon completion of the course the student will be able to identify SQL Server operating options and architecture.

5. Upon completion of the course the student will be able to identify SQL Server operating system options.
6. Upon completion of the course the student will be able to identify SQL Server architecture.
7. Upon completion of the course the student will be able to identify SQL Server platforms.
8. Upon completion of the course the student will be able to interpret data and create options as related to SQL Server.
9. Upon completion of the course the student will be able to interpret data and create relational database architecture as related to SQL Server.

Upon completion of the course the student will be able to install SQL Server and identify system requirements.

10. Upon completion of the course the student will be able to identify SQL Server system installation elements.
11. Upon completion of the course the student will be able to identify SQL Server system hardware requirements.
12. Upon completion of the course the student will be able to interpret data and install SQL Server.
13. Upon completion of the course the student will be able to interpret data and verify installation procedures.
14. Upon completion of the course the student will be able to identify relational database applications and considerations.
15. Upon completion of the course the student will be able to interpret data and create a relational database.
16. Upon completion of the course the student will be able to interpret data and manage a relational database.
17. Upon completion of the course the student will be able to identify tables and their applications as related to SQL Server.
18. Upon completion of the course the student will be able to interpret tables as found in SQL Server.
19. Upon completion of the course the student will be able to interpret data and create tables in SQL Server.
20. Upon completion of the course the student will be able to identify constraints as related to SQL Server.
21. Upon completion of the course the student will be able to interpret data and index SQL Server applications.
22. Upon completion of the course the student will be able to identify triggers as related to SQL Server.
23. Upon completion of the course the student will be able to interpret data and create Triggers in SQL Server.

Upon completion of the course the student will be able to identify elements required to make SQL transactions.
24. Upon completion of the course the student will be able to identify the elements of the SQL Server select statement.
25. Upon completion of the course the student will be able to interpret data and create an SQL Server select statement.
26. Upon completion of the course the student will be able to identify column elements in SQL Server.
27. Upon completion of the course the student will be able interpret data and create columns in SQL Server.
28. Upon completion of the course the student will be able to identify row elements in SQL Server.
29. Upon completion of the course the student will be able to interpret data and create rows in SQL Server.
30. Upon completion of the course the student will be able to identify search condition elements in SQL Server.
31. Upon completion of the course the student will be able to interpret data and make a search in SQL Server.
32. Upon completion of the course the student will be able to interpret data and sort data in SQL Server.

Upon completion of the course the student will be able to identify the language elements of SQL Server.

33. Upon completion of the course the student will be able to identify the language elements of SQL Server.
34. Upon completion of the course the student will be able to define language elements in SQL Server.
35. Upon completion of the course the student will be able to interpret data and create query statements in SQL Server.
36. Upon completion of the course the student will be able to perform queries in SQL Server.
37. Upon completion of the course the student will be able to identify the elements of join procedures in SQL Server.
38. Upon completion of the course the student will be able to interpret data and join tables in SQL Server.
39. Upon completion of the course the student will be able to identify storage procedures in SQL Server.
40. Upon completion of the course the student will be able to interpret data and store data in SQL Server.

Upon completion of the course the student will be able to identify SQL Server Web Tools.

41. Upon completion of the course the student will be able to identify SQL Server Web Tool elements.
42. Upon completion of the course the student will be able to interpret data and use SQL Server Web Tools.
43. Upon completion of the course the student will be able to interpret data and create a Web Page using SQL Server.
44. Upon completion of the course the student will be able to identify the elements of database administration as related to SQL Server.
45. Upon completion of the course the student will be able to interpret data and administer a database.

Upon completion of the course the student will be able to identify security procedures as related to SQL Server.

46. Upon completion of the course the student will be able to identify permission validation elements as related to SQL Server.
47. Upon completion of the course the student will be able to interpret data and apply permission validation procedures in SQL Server.
48. Upon completion of the course the student will be able to identify levels of security as related to SQL Server.
49. Upon completion of the course the student will be able to interpret data and apply security procedures as related to SQL Server.
50. Upon completion of the course the student will be able to interpret data and apply data loss prevention procedures as related to SQL Server.
51. Upon completion of the course the student will be able to interpret data and apply data recovery procedures as related to SQL Server.
52. Upon completion of the course the student will be able to interpret data and apply data backup procedures as related to SQL Server.
53. The student will demonstrate an ability to meet deadlines.
ASSESSMENT OF LEARNER OUTCOMES:
Assessment methods may include, but are not limited to, the following: Homework, Assignments, Quizzes, Class Participation, Chapter Tests, and Final Exam. The grading scale and the process for calculating the course grades are to be determined by the individual instructors. This information will be included in each instructor’s syllabus.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center in Room 3354 or call 288-7670.