COURSE SYLLABUS

ITMT 1403-73700 Querying MS SQL Server 2012 w/TSQL
SPRING 2015

BUSINESS/INFORMATION TECHNOLOGY
Room TBA, 972-273-3450 MW 6:00pm-10:00pm

This course syllabus is intended as a set of guidelines for ITMT 1403. Both North Lake College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

Instructor Information:
Instructor’s Name: Julian Carranza
Email Address: jcarranza@dccc.edu
Office Phone Number: 972-860-8922
Office Location: None
Office Hours: By appointment only

Course Information
Course title: Querying MS SQL Server 2012 w/Transact-SQL
Course number: ITMT 1403
Section number: 73700
Credit hours: 4
Class meeting time: 6:00-9:00 PM Lecture, Lab 9:00-10:00PM MW
Course description:
Beginning SQL Server database course using SQL Server 2012. Covers the theoretical background to T-SQL querying and programming, table creation, and data integrity. A look at different aspects of querying and data modification, concurrency and transactions. Finally, covering an overview of the T-SQL programming capabilities in SQL Server. In addition, we will review sample questions for the Microsoft 70-461 certification “Querying Microsoft SQL Server 2012”.
Course prerequisites: Keyboarding skills required. ITMC 1441 or ITMC 1458 or instructor approval; familiarity with the three programming constructs is required.

Required or Recommended Textbooks and Materials

2. One USB Flash or thumb drive. This will be used to save your book work and tests.

Course Objectives

This course offers the opportunity to learn querying concepts in Microsoft SQL Server 2012 TSQL. Students will learn how to retrieve data from a relational database, as well as insert, update, and delete data. We will understand the importance of the language in the programming world, how rich its rich features are, and how widely it is used in the IT industry.

Specific Course Learning Outcomes

<table>
<thead>
<tr>
<th>LEARNING ACTIVITY</th>
<th>LEARNING OUTCOMES</th>
<th>EVALUATION</th>
<th>SCANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductions; Getting Started</td>
<td>Introduction, goals, course expectations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing Simple queries</td>
<td>Proficiency in simple queries</td>
<td>Quizzes, Labs, Exam</td>
<td>C1,C3,C5,C15,F1</td>
</tr>
<tr>
<td>Functions and expressions</td>
<td>Understand concepts using built-in functions, expressions</td>
<td>Quizzes, Labs, Exam</td>
<td>C11,F1,F5</td>
</tr>
<tr>
<td>Querying multiple tables – JOIIns and subqueries</td>
<td>Fetching data from multiple tables</td>
<td>Quizzes, Labs, Exam</td>
<td>C11,C14,C15,C18,C19,C20,F1</td>
</tr>
<tr>
<td>Modifying Data - Part 1</td>
<td>Modify data in a single table</td>
<td>Quizzes, Labs, Exam</td>
<td>C11,C14,F5,F12</td>
</tr>
<tr>
<td>Modifying Data Part - 2</td>
<td>Modify data using joins, subqueries, etc.</td>
<td>Quizzes, Labs, Exam</td>
<td>C5,C6,F1,F5,F7</td>
</tr>
<tr>
<td>Programming with TSQL</td>
<td>Introduction to programming a database</td>
<td>Quizzes, Labs, Exam</td>
<td>C1,C5,C6,F1,F7,F16</td>
</tr>
<tr>
<td>Moving logic to the database</td>
<td>Implementing code in the database</td>
<td>Quizzes, Labs, Exam</td>
<td>C5,C6,F1,F7</td>
</tr>
<tr>
<td>Exploring data types and features</td>
<td>Diving into data types and features of SQL Server</td>
<td>Quizzes, Labs, Exam</td>
<td>C5,C6,F1,F7</td>
</tr>
<tr>
<td>Advanced queries</td>
<td>Putting it all together</td>
<td>Quizzes, Labs, Exam</td>
<td>C3,C5,F9,F16</td>
</tr>
<tr>
<td>Current Topics in data storage – NoSQL, Azure, MongoDB, etc.</td>
<td>As time permits…</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Learning Outcomes Map to Performance Objectives

As noted above, these learning outcomes address the following SCANS competencies and foundation skills: C11, C12, C13, C14, C16, C18, C19, F1, F2, F5, F7, F8, F9, F10, F16. See the list below for an explanation of these items.

The course Independent Project addresses the following SCANS competencies and foundation skills: C1, C3, C6, C7, C8, C11, C12, C13, C14, C16, C17, C18, C19, C20, F1, F2, F3, F6, F7, F8, F9, F10, F11, F12, F16.

In addition to the SCANS listed above, successful completion of this course will also address SCANS C10, C15, F13, F17. The following Workplace Skills will be addressed: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34, 35.

PERFORMANCE OBJECTIVES

SCANS Competencies

The Secretary's Commission of Achieving Necessary Skills (SCANS), established in 1990, defined a common core of skills that constitute job readiness. The Office Technology Department at North Lake College is committed to prepare you with the knowledge and skills you need to succeed in today's dynamic work environment.

<table>
<thead>
<tr>
<th>Resources</th>
<th>C1, C2, C3.C4. Allocates Time, Allocates Money, Allocates Materials and Facility Resources, Allocates Human Resources</th>
</tr>
</thead>
</table>

SCANS FOUNDATION SKILLS

|-------------|---------------------------------------------------------------------------------|

WORKPLACE SKILLS

1. Work ethics.
2. Implement responsibilities of job position including exhibition of dependability, demonstrating high confidentiality, and meeting of organizationally defined expectations.
3. Operate within scope of authority adhering to company rules, regulations, and policies as established including interpretation of employer/employee handbook and procedures.
5. Practice time management and follow work schedule.
6. Assume responsibility for own decisions and actions.
7. Exhibit pride and positive attitude.
8. Display initiative and enthusiasm in undertaking new tasks.
9. Show assertiveness appropriate to the situation.
10. Seek work challenges.
11. Understand and apply ethical principles to decision-making.
12. Understand the importance of providing good customer service (internal and external).
13. Exhibit ability to handle stress.
14. Participate in meetings in a positive and constructive manner.
15. Maintain state-of-the-art skills through participation in in-service or other training.
17. Interpersonal relationships.
18. Respect individual diversity.
19. Respond to praise or criticism.
20. Provide constructive criticism or praise.
21. Channel and control emotional reactions.
22. Resolve conflicts.
23. Display a positive attitude.
25. Employ appropriate skills for gathering and retaining information.
26. Interpret written, graphic, and oral instructions.
27. Identify problems.
28. Clarify individual and company purposes and goals.
29. Identify available solutions and their impact including evaluation of credibility of information, and location of information.
30. Evaluate options.
31. Set priorities.
32. Select/implement options/decisions including prediction of results of proposed action.
33. Organize personal workloads.
34. Participate in brainstorming sessions to generate new ideas and solve problems.


**Course Outline**

See the course schedule at the end of this syllabus.

**Means of Assessment of Course Learning Outcomes**

Your understanding of the course material and your grade will be determined as follows:

**Practices and Application Tests**

You may ask for help when completing a practice or application exercise. You may also use your book or notes. Your instructor will check the document for accuracy and return it to you for correction if errors are found. You will be allowed to revise the document one time without being penalized. The second revision will be graded from a base score of 85. If the document still contains errors after that revision, you must re-work the exercises in your text. Then you must complete a different test and score a 70 or above before proceeding with the course material.

**Production Tests—Test documents created using the computer**

You may use your text or notes while testing. You may NOT ask for help. If you do ask for help, points will be deducted from your grade, depending on the amount of help given. If you score below 70 on a production test, you may re-test, with your highest score being 85.
All tests must be taken during your scheduled class time with your instructor present. All tests must be returned to your instructor after you have reviewed the results with your instructor. All test materials MUST remain in the classroom at all times.

**Independent Project**

( none)

**Evaluation Procedures**

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz (2)</td>
<td>18%</td>
</tr>
<tr>
<td>Mid-Term Test</td>
<td>30%</td>
</tr>
<tr>
<td>Written Final and Lab Exam</td>
<td>50%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Practice, Application, and Production Test Grading:**
Each document is 100 total points. 5 points will be deducted for each typographical or formatting error.

**Exams and Assignments**
There are two chapter tests, quizzes and class exercises, and a final comprehensive exam.

**Grading Scale**

<table>
<thead>
<tr>
<th>90 – 100</th>
<th>= A</th>
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<tbody>
<tr>
<td>80 – 89</td>
<td>= B</td>
</tr>
<tr>
<td>70 – 79</td>
<td>= C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>= D</td>
</tr>
<tr>
<td>Below 60</td>
<td>= F</td>
</tr>
</tbody>
</table>

**Discipline/ Course/ Department/Policies**

**Attendance**

Your instructor will be present only during your scheduled class time. Class attendance is critical and required. **You are required to attend class until your coursework is completed.** If you require additional lab/practice time, ask your instructor for the times available. Additional practice time is available on a first-come, space-available basis.

**NOTE:** Attendance will be taken at the beginning of each class. If you must come in late, please do so quietly as to not disturb the course or fellow learners.
The last day of class is March 4, 2015.

The last day to withdraw (drop) from a class is 2/25/15. Please see instructor first before dropping.

All coursework, except for the final Production Test and Independent Project are due on or before 3/4/15. Work turned in after this date will receive a grade of zero (0).

You can only take your final LabTest on the last class day.

Late work will be accepted with deductions and reduced maximum score, as determined by the instructor.

INSTITUTIONAL POLICIES

ACADEMIC DISHONESTY
The Student Code of Conduct prohibits academic dishonesty and prescribes penalties for violations. According to this code, which is printed in the college catalog, "academic dishonesty", includes (but is not limited to) cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion". Academic dishonesty may result in the following sanctions, including, but not limited to:
1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS or HOLY DAY(S)
Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the Student Obligations section of the college catalog for more explanation. You are required to complete any assignments or take any examinations missed as a result of the absence within the time frame specified by your instructor.

REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT
In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, any student who feels that he or she may need any special assistance or accommodation because of an impairment or disabling condition should contact the ADA/ACCESS Office at (972) 273-3165 or visit Room A-430 at North Lake College. It is the policy of NLC to provide reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the ADA/ACCESS Office.

DROP POLICY
If you are unable to complete this course, you must officially withdraw by (Day of the week), (Month/Date/Year). Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you.

All Dallas County Community Colleges charge a higher tuition rate to students
registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, go online to: http://www.DCCCD.edu/thirdcourseattempt.

FINANCIAL AID STATEMENT
Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate are also subject to this policy.

To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at http://www.fafsa.ed.gov.

COUNSELING SERVICES
Counseling services for personal issues are provided to all students currently enrolled at North Lake College. These services are provided by licensed professionals who are bound by confidentiality (within ethical parameters) at no charge. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills. To make an appointment call 972-273-3333 or visit A 430.

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop.

You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions.

Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/6drop.

WRITING CENTER (A309)
The Writing Center supports and supplements classroom instruction by providing focused, individualized writing instruction in response to the specific needs of the student. Its services are available to all North Lake students, not just those enrolled in English classes. The tutors are skilled writing specialists who can help students clarify writing tasks, understand instructors’ requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, and properly use and document sources. Rather than merely editing or “fixing” students' papers, the Writing Center staff focuses on helping students develop and improve their writing skills.

Located in Room A309, the Writing Center is open 8:00 AM to 9:30 PM Monday
through Thursday and 8:00 AM to 5:00 PM on Friday. Saturday hours are 9:00 AM to 2:00 PM during fall and spring semesters. Hours will vary during other sessions. Students who have scheduled an appointment in advance will have a tutor available to work with them at their scheduled time. Walk-ins are welcome, but they may have to wait for an opening or make an appointment for a later time, perhaps a later day. To schedule an appointment, come by the Writing Center, call 972-273-3089, or email nlcwritingcenter@daccd.edu.
Specific Learning Activities—Tentative Course Schedule

ITMT 1403-71700
Querying MS SQL 2012 with Transact-SQL

The last day of class is March 4, 2015.
The last day to withdraw from class is 2/25/15. Please see your instructor before withdrawing.

⇒ NOTE: WE WILL NOT BE COVERING CERTAIN CHAPTERS OF THE BOOK. READ THE SYLLABUS CAREFULLY. COURSE ATTENDANCE HIGHLY SUGGESTED AS WE WILL COVER INFORMATION NOT IN THE TEXTBOOK⇐

WEEK 1
----- Introductions, Syllabus, getting started.
----- Orientation - Computer set-up, familiarity with environment
----- History of SQL Server, Transact-SQL, Theoretical background of SQL
----- Simple queries

WEEK 2
----- Tables, rows, columns, data, more simple queries, definitions
----- Expressions, built-in functions
----- Lab 1

WEEK 3
----- Quiz 1, more Language features
----- Querying multiple tables – joins, subqueries, Common-Table Expressions
----- Temp tables
----- Modifying data in a single table, derived tables, views
----- Modifying data using joins, Lab 2

WEEK 4
----- Lab 3
----- Full-Text Search
----- Moving logic to SQL Server
----- Mid-Term examination
WEEK 5
   _____ Introduction to programming with TSQL
   _____ Exploring advanced features, Lab 4
   _____ Quiz 2

WEEK 6
   _____ Advanced queries
   _____ TBA

WEEK 7
   _____ More Advanced Queries
   _____ Current Topics and emerging technologies (time permitting)
   _____ Lab + final review
   _____ FINAL EXAMINATION (COMPREHENSIVE)

   Review of current test certification questions from simulated Microsoft examinations will be ongoing throughout the semester.

   Students will not be tested over these review questions.
### ITMT 1403

#### PROGRESS RECORD

<table>
<thead>
<tr>
<th>Labs and Examinations</th>
<th>Assignment</th>
<th>Grade</th>
<th>Assignment</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs</td>
<td></td>
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<tr>
<td>Quiz 1</td>
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<tr>
<td>Quiz 2</td>
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<tr>
<td><strong>Test + Final Examination</strong></td>
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<tr>
<td>Test 1</td>
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<tr>
<td>Test 2</td>
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<td></td>
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<tr>
<td>Final Exam</td>
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</tbody>
</table>

- **QUIZ AVERAGE** ________ —18%
- **MID-TERM** ________ —30%
- **FINAL (LAB)** ________ —25%
- **FINAL (WRITTEN)** ________ —25%
- **PARTICIPATION/ATTENDANCE** ________ —2%

- **FINAL AVERAGE** ___
- **FINAL GRADE** ___