

**Kirkwood Community College Course Syllabus**  
**Relational Database Technologies & SQL**  
**CIS-335**  
**Spring 2016**

<b>Instructor</b>	<i>Samantha Hench</i>
<b>Instructor Information</b>	<p><b>Office location:</b> 233 Nielsen Hall</p> <p><b>Office Hours:</b> Send an email in Talon for an appointment or visit my office during the following times:  Monday 8:30-10:00  Tuesday 12:30-2:00  Wednesday 8:30-10:00  Thursday 12:30-2:00  Friday By Appointment</p> <p><b>Telephone number:</b> 319-398-5899 x 5859</p> <p><b>Email address:</b> Talon email is preferred. My Kirkwood email is <a href="mailto:samantha.hench@kirkwood.edu">samantha.hench@kirkwood.edu</a>.</p> <p><b>Notes:</b> Please allow up to 48-hours for a response to all messages. Messages in TALON are the best way to contact me. In any contact, please proofread, spell-check, professionally write, and include a meaningful subject line such as – Subject: Access Chapter2 Skill-Based Training issue. In the message please give your first and last name, and the course you are contacting me about. Without this information a timely response may be unlikely as additional emails will be needed for clarifications.</p> <p>Other email suggestions: Sometimes I get messages like "Hi, this is Sue. I need help with class." I want to help the student, but haven't enough information. A better email or phone message would be "Hi, this is Sue Smith from Intro to Computers in your Monday Wednesday section. I'm not sure which files to upload for the Word Section 3 Assignment. Do you want the merged document, or just the parts used to create it? My email is <a href="mailto:suesmith@yahoo.com">suesmith@yahoo.com</a>. Thanks, Sue."</p>
<b>Section Information</b>	<p><b>Synonym number:</b> CRF01- 0246877</p> <p><b>Course Meeting Times:</b> Tuesday and Thursday 9:05-11:05</p>
<b>Credit hours</b>	3 credits
<b>Contact hours</b>	2 hours lecture, 2 hours lab
<b>Co-requisites</b>	NONE
<b>Prerequisites</b>	CSC-110 and either CIS-121 or CIS-128
<b>Course Description</b>	Emphasizes basic concepts and principles of database systems. Introduces database systems and databases, normalization, table creation, and basic system and language

	<p>support (SQL) for database systems. Focuses on data management and design inquiries to produce information for decision making, data analysis and integration with other software applications.</p>
<p><b>Required Course Materials</b></p>	<p>Books and course materials for this course are available at the Kirkwood Bookstore.</p> <p>A Guide to SQL, Pratt and Last, Cengage Learning, 9th edition 2015. ISBN: 978-1-111-52727-3</p> <p>Additional materials for this course include:</p> <ul style="list-style-type: none"> <li>• 1GB or Higher flash drive for downloading and saving assignments</li> </ul>
<p><b>Course Student Learning Outcomes and Competencies</b></p>	<p>Upon completion of this course students will be able to:</p> <p><b>1.0 General Course Competencies</b></p> <ol style="list-style-type: none"> <li>1.1. Design and document a relational database in third normal form based on business needs.</li> <li>1.2. Create a relational database based on database design and business needs.</li> <li>1.3. Insert data into relational database based on database design and business needs.</li> <li>1.4. Create and execute SQL (Structured Query Language) statements to retrieve information from a properly designed relational database.</li> <li>1.5. Perform database administration, customization, integration and security operations.</li> <li>1.6. Define and utilize constraints.</li> <li>1.7. Create and execute simple stored procedures, user-defined functions, and triggers.</li> </ol> <p><b>2.0 Unit Objectives</b></p> <ol style="list-style-type: none"> <li>7.1 Design and document a relational database in third normal form based on business needs: <ol style="list-style-type: none"> <li>2.1.1. Analyze the business requirements.</li> <li>2.1.2. Choose appropriate entities attributes for which to keep records.</li> <li>2.1.3. Correctly relate entities to table design.</li> <li>2.1.4. Chose a data type for attributes.</li> <li>2.1.5. Identify and assign primary keys to tables.</li> <li>2.1.6. Identify and assign foreign keys to tables to implement relationships.</li> <li>2.1.7. Define functional dependency and identify when one column is functionally dependent on another.</li> <li>2.1.8. Normalize the relationships to third normal form.</li> <li>2.1.9. Produce Entity-Relationship diagrams.</li> <li>2.1.10. Produce a data dictionary.</li> </ol> </li> <li>2.2. Create a relational database based on database design and business needs: <ol style="list-style-type: none"> <li>2.2.1. Use administrative tools to interact with a server DBMS.</li> <li>2.2.2. Create a database within a server DBMS.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>2.2.3. Use SQL data definition statements to create tables in a database.</li> <li>2.3. Insert data into relational database based on database design and business needs: <ul style="list-style-type: none"> <li>2.3.1. Use SQL data definition statements to insert data in a database.</li> <li>2.3.2. Use SQL data definition statements to update data in a database</li> <li>2.3.3. Use SQL data definition statements to delete data in a database.</li> </ul> </li> <li>2.4. Create and execute SQL (Structured Query Language) statements to retrieve information from a properly designed relational database: <ul style="list-style-type: none"> <li>2.4.1. Understand SQL data manipulation statements.</li> <li>2.4.2. Use SQL query statements to recall data stored in a database.</li> <li>2.4.3. Use SQL query statements to construct simple single table queries.</li> <li>2.4.4. Use SQL query statements to construct multiple table queries.</li> <li>2.4.5. Understand various types of joins to relate tables in a database.</li> <li>2.4.6. Use SQL queries to group or summarize data in a database.</li> </ul> </li> <li>2.5. Perform database administration, customization, integration and security operations: <ul style="list-style-type: none"> <li>2.5.1. Use administrative tools.</li> <li>2.5.2. Create or delete views.</li> <li>2.5.3. Create or drop an index.</li> <li>2.5.4. Create or delete database users.</li> <li>2.5.5. Assign and change database permissions.</li> <li>2.5.6. Back-up and restore data.</li> </ul> </li> <li>2.6. Define and utilize constraints. <ul style="list-style-type: none"> <li>2.6.1. Create, edit, and update constraints.</li> <li>2.6.2. Understand the types and uses of referential integrity constrains.</li> <li>2.6.3. Decide when and how to implement referential integrity constraints.</li> </ul> </li> <li>2.7. Create and execute simple stored procedures, user-defined functions, and triggers. <ul style="list-style-type: none"> <li>2.7.1. Create and execute user-defined procedures.</li> <li>2.7.2. Create and execute user-defined functions.</li> <li>2.7.3. Create and execute triggers.</li> </ul> </li> </ul>
<p style="text-align: center;"><b>Late Work/Make-up Test Policy</b></p>	<p>You <u>MUST</u> contact your instructor to make up any late assignments. All late assignments will receive a 10% reduction for each week late, no exceptions.</p>

<p><b>Class Attendance Policy and College Sponsored Activities</b></p>	<p>As stated in the Student handbook: In compliance with Public Law 105-244, Kirkwood Community College makes a wide variety of general institutional information available to students. For additional information, go to: <a href="http://www.kirkwood.edu/site/index.php?p=32303">http://www.kirkwood.edu/site/index.php?p=32303</a></p>
<p><b>Productive Classroom Learning Environment</b></p>	<p>We believe that the best learning takes place in an environment where faculty and students exhibit trust and mutual respect.</p> <p>In a productive learning environment, faculty and students work cooperatively, recognize and respect differences, model the values of character and citizenship, and become lifelong learners.</p> <p>This course is part of several degrees intended to help prepare students for careers in applied sciences, industrial technologies, information technology, and business fields. It is also taken by many students who intend to transfer to longer programs in colleges and universities. Proper academic and professional behavior is required. Any student who cannot communicate appropriately and be respectful of others may be referred to his or her dean for disciplinary action and dropped from the class.</p> <p>You are expected to be respectful of your fellow student’s discussions in class and be professional. Failure to communicate appropriately and be respectful of others may be referred to his or her dean for disciplinary action and dropped from the class.</p>
<p><b>Plagiarism Policy</b></p>	<p>Kirkwood Community College is a community of shared values, foremost of which is a strong commitment to academic integrity, honorable conduct, and respect for others. Through the honest completion of academic work, students sustain the integrity of the college and promote a culture of civility, fairness, trust, and respect among its members. Those who violate these standards must be held responsible.</p> <p>Kirkwood students are responsible for authenticating all work in a course. This includes but is not limited to quizzes, exams, presentations, papers, journals, and projects. For this reason, it is recommended that students engage in a verifiable working process on assignments and conduct themselves during class in a manner that does not lead to the suspicion of academic dishonesty. Examples of Academic Dishonesty include but are not limited to: Plagiarism and Fabrication, Misrepresentation, Cheating and Facilitation, and Impeding Fair and Equal Access to the Education and Research Process.</p> <p>Students found cheating on any part of an assignment will receive no points for the total assignment. This includes sharing work or copying sections of another student's work. Regardless of the circumstances, both students involved will be considered at fault.</p> <p>It is the student’s responsibility to be aware of the behaviors that constitute academic dishonesty. A detailed description of this policy and the sanctions associated with it can be found here: <a href="http://www.kirkwood.edu/site/index.php?p=32303">http://www.kirkwood.edu/site/index.php?p=32303</a></p>
<p><b>Campus Closings</b></p>	<p>See Student Policies: General Policies and Student Rights</p>

	<a href="http://www.kirkwood.edu/site/index.php?p=32309">http://www.kirkwood.edu/site/index.php?p=32309</a>													
<b>Academic Accommodations</b>	<p>Students with specific academic and/or classroom needs may request individualized accommodations. Students wishing to request accommodations should complete an 'Accommodation Request Form' which is available at the Learning Services office, 2063 Cedar Hall, or online at <a href="http://www.kirkwood.edu/accommodations">www.kirkwood.edu/accommodations</a>. Students will be asked to provide documentation supporting their request. An accommodation plan must be completed each semester and given to instructors before academic accommodations will be provided.</p> <p><b>NOTE: THIS COURSE WILL BE VIDEO TAPED including audio for accommodations.</b></p>													
<b>Midterm grades</b>	<p>A midterm grade will be calculated and posted on EagleNet. The midterm grade is a grade-in-progress, and will not affect your official GPA, nor will it impact financial aid. The midterm grade has three purposes: first, to communicate your academic performance; second, to provide opportunities for you to discuss your progress with your instructor; and third, to allow Kirkwood to design college-wide intervention programs that will improve student success.</p>													
<b>Student Evaluation</b>	<p>Students will be assessed on their knowledge of the course competencies, outcomes, and objectives through LAB activities, homework assignments, and exams. This class is a combination of lecture and lab. Make a backup copy of your assignments. Please save all returned/graded work – just in case - on the flash drive you purchased for the course!</p> <p>Points will be awarded for each item and count toward your total grade. The points will be tallied at the end of the semester and placed into categories for a final grade. For this reason, grades received on individual tests or assignments will not necessarily translate into the exact same final grade.</p> <p>Percentage Breakdown:</p> <table border="1"> <thead> <tr> <th>Assignment</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Homework/Labs</td> <td>40%</td> </tr> <tr> <td>Final Course Project</td> <td>20%</td> </tr> <tr> <td>Unit Exams</td> <td>30%</td> </tr> <tr> <td>Journals</td> <td>10%</td> </tr> </tbody> </table>				Assignment	Percentage	Homework/Labs	40%	Final Course Project	20%	Unit Exams	30%	Journals	10%
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<b>Grading Scale</b>	<i>A</i>	93% - 100%	<i>C</i>	73% - 76%										
	<i>A-</i>	90% - 92%	<i>C-</i>	70% - 72%										
	<i>B+</i>	87% - 89%	<i>D+</i>	67% - 69%										
	<i>B</i>	83% - 86%	<i>D</i>	63% - 66%										
	<i>B-</i>	80% - 82%	<i>D-</i>	60% - 62%										
	<i>C+</i>	77% - 79%	<i>F</i>	59% or less										
<b>Drop Date</b>	<p>To get the last day to drop a class, or the last day for a 50% or 100% refund, go to any of EagleNet's search for sections screens. You don't even have to login if you just click EagleNet for Students and then Search for Sections.</p>													

	<p><a href="https://eaglenet.kirkwood.edu/production/WebAdvisor?TOKENIDX=9443580219&amp;type=M&amp;constituency=WBST&amp;pid=CORE-WBST">https://eaglenet.kirkwood.edu/production/WebAdvisor?TOKENIDX=9443580219&amp;type=M&amp;constituency=WBST&amp;pid=CORE-WBST</a></p> <p>In EagleNet for Faculty when you're logged in, the last item under Faculty Information is your Search for Sections link:  <a href="https://eaglenet.kirkwood.edu/production/WebAdvisor?TOKENIDX=3671408920&amp;type=M&amp;constituency=WBFC&amp;pid=CORE-WBFC">https://eaglenet.kirkwood.edu/production/WebAdvisor?TOKENIDX=3671408920&amp;type=M&amp;constituency=WBFC&amp;pid=CORE-WBFC</a></p> <p>Students dropping a class during the first two weeks of a term may receive a full or partial tuition refund for 16 week terms, for shorter courses check with Enrollment Services for total withdraw information.</p> <p>The last date to drop this class for this term is <u>Friday, April 25</u>.</p> <p>Details of the refund schedule can be found under Academic &amp; Enrollment Policies at:  <a href="http://www.kirkwood.edu/student_policies">www.kirkwood.edu/student_policies</a></p>
<b>Final Exam Information</b>	<p>Final exams are scheduled during the last week of the term from <u>May4</u> to <u>May10</u>. The final exam for this class is scheduled on <u>THURSDAY, May 5</u> from 8:00-9:50.</p>
<b>Emergency Information</b>	<p>See Facilities: Emergency/Crisis Information  <a href="http://www.kirkwood.edu/site/index.php?p=7987">http://www.kirkwood.edu/site/index.php?p=7987</a>  <i>[If desired, list emergency phone numbers, department office locations, etc.]</i></p>
<b>Other Information</b>	<p>Check Refund Policy at: <a href="http://www.kirkwood.edu/registration">www.kirkwood.edu/registration</a></p>

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